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## Original Department.

### "New Remedies."

By Chas. C. Fredigke, Chicago.

A COPY of an extra edition of a few pages of the New England Medical Monthly was recently sent me by the editor, (whom I do not know and to whom I am not known,) containing an article by Dr. Bigelow, referring to the introduction of new drugs into our materia medica. In return for this courtesy I sent an article entitled "New Remedies" for the pages of that journal, stating that it was written a year ago for publication in the pharmacal press, but declined for the reason that the subject matter came not within their province, that I was in favor of a full elucidation of matters of such vital interest, not averse to professional criticism, however severe, and that if he saw fit to publish it he was free to make any comments on it he pleased. When I received a full copy of the journal I was surprised to see my article swamped with "New Remedies" already, and saw at once that it had fallen into the wrong camp. As published it is too one-sided, for I did not wish to occupy too much space.

As understood by me the term "New Remedies" includes anything and everything, the source, composition and therapeutic application and effects of which are new, but partially known, and therefore not reliable in all respects, no matter by what so called authority published or recommended, *i. e.*, anything derived from nature or the chemical and pharmaceutical laboratory.

The tendency of manufacturing chemists and pharmacists to meet the indications of the results of the more or less experimental treatment and therapeutics as brought to light in hospitals, university clinics, etc., is fraught with danger when applied to the public at large; the tendency of physicians to recommend and apply preparations thus produced is no less dangerous.

For example: Because we have, or think we have been successful as to the physiology of the various parts of the alimentary tract, the chemical composition of the fluids these parts secrete, and the changes which the various kinds of food undergo to and beyond the point of assimilation, can physicians recommend and advise the use of a legion of preparations, devised and manufactured

upon these premises? There is a legion of pepsin preparations for the stomach, a legion for the liver containing idealized glycogen, another for the duodenum and pancreas, containing duodenin and pancreatin, another for the upper segment of the small intestines containing idealized succus entericus and the secretions of Brunner's glands and Lieberkühn's crypts, and at present manufacturers vie with each other to produce articles to obviate digestion entirely. Physicians prescribe all these articles with confidence in and reliance on their virtues and they admit "ads." of them into their journals.

How the profession is often carried away against its own better judgment is shown in a very striking and forcible manner by Dr. E. Cutter in his otherwise excellent article on cereal foods in the American Medical Weekly for January last. Because we chemists, physiologists and pathologists have found out something about starch, dextrin, sugar, gluten, diastase, glucose, etc., the artificial foods are divided by him into perfect and genuine, defective and injurious, and worthless and fraudulent ones, according as they contain the necessary (?) quantity of gluten, or not sufficient, or none at all. It is further said that so and so much gluten has to be added to this, and so and so much to that preparation to make them perfect! This is about as far as a gentleman of scientific and academic attainments and an enthusiast in his profession can go. I was astonished to read for the first time in my life that a perfect artificial food for infants was possible. Now, if physiology, human and comparative, if pathology and official reports on the mortality of infants less than six months old, teach us anything, they show that the greater majority by far die of diseases brought on, directly and indirectly, by the attempt of man to steal a march upon nature; for of five sound infants raised from birth by the "bottle" with any kind of artificial food, from cow's milk to the most scientifically prepared artificial trademark nostrum, three will die before they are one year of age. But in the face of this established fact, there are physicians whose understanding of these matters is so superficial and they have had such a singular streak of good luck in their private practice, that the infants which they advised to raise by the bottle were always among those who survive this process, and since "we know only what we see" they advise the bottle for convenience sake even in cases where the expense of a nurse is no consideration. When we examine the labels of all the articles which Dr. C. mentions (except those which come by the barrel) we find that most all of them are endorsed by the profession, directors of children's hospitals, superintendents of foundling's homes, etc. Some of them show the analysis of animal and human milk in comparison with an analysis of themselves, and this always comes out in their favor as compared with the others, because they contain so much more of this and so much less of that! Some of them claim that they are better than Liebig's soup because more convenient and cheaper! Some of them say all that possibly can be said, for they claim that they are "a perfect substitute for mother's milk!" I presume that Dr. C. needs not to be told in so many words that our knowledge of the whole matter has not yet reached that degree of exactness that we can say we are able to prepare a perfect artificial food, that gluten does not belong in the alimentary canal of infants, that cow's milk is excellent food for calves, but something quite different to children at the breast, and that the most scientifically prepared artificial food does not come near by a great deal to good cow's milk. How then was it possible that the professional mind could become so warped on this important matter? To arrest the terrible mortality among infants in the charitable institutions of Bavaria, that state enlisted (25 years ago) the talent of Liebig to discover means for relief; his soup was the result. The death rate was materially reduced by it but since the preparation of this soup is so complicated that it requires a chemist and a laboratory to produce it conveniently, manufacturing pharmacists went to work and produced the soup in the form of powder, claiming for it the same composition with the advantage of convenience and cheapness thrown in. Thus was the pharmaceutic industry of preparing artificial foods for infants, put upon its path around the world! It has been found, however, that Liebig's soup is not a particle better than good cow's milk. It can be shown that any addition made to it, be it even nothing else but water, will make it only the more dissimilar to human milk; and though Braconnot tells us and pretends to show us that by the addition of so much water and so much milk sugar it will become very nearly like human milk, yet it is the part of a physician to advise the use of it only when there is no choice left him between it and artificial food.

If Dr. Cutter does not wish to see the results of his investigation perverted, for he evidently means that these infants' foods are intended only for children over six months old or for invalids, he will have to supplement his paper, giving specific explanations, for if this is not done all these foods will be "perfect" before he is well aware of it! The general practitioner will recommend them, seeing they come so highly endorsed, yet thereby commit a most egregious blunder! The secular press is beginning to teem already with commendations by respectable practitioners, on this article by Dr. C.

I have thus been at some length to show that what a professor says is not always to be taken as authority, and that when it comes to the question of putting his views into practical shape, it becomes of momentous importance to the public at large; and, moreover, to show that if the printing of doses and uses on the label of a pharmaceutical preparation, in the name and style of which the manufacturer takes no proprietary or trade-mark interest, stamps such preparation as a trade-mark nostrum according to Dr. Bigelow's views, then it becomes sublime to see Dr. C. having recourse to the aid of powerful microscopes in order to be able to endorse one trade-mark nostrum and to condemn another!—nostrums which become, by the endorsement by the medical profession and their consequent abuse, the curse and the abomination of the latter half of the 19th century. Where can a copy of a code on professional ethics be found? Please!

In view of more recent articles I think I

now comprehend the real animus of this crusade, that this is a controversy between manufacturing chemists and pharmacists, in which a retail dealer in drugs, medicines and chemicals, wines, liquors, cigars, and compounds "for physicians use only," homœopathic subtleties, surgical instruments, orthopœdic appliances, and physicians' supplies, artists' materials, paints, oils, glass, varnish, brushes and putty, cutlery, stationery, and books, dry goods, groceries, and boots and shoes, like myself, has no interest, for it is like a foot-ball, unwieldy, and when pressed down on one side it will bulge out on the other; a retail druggist's principle is to keep everything which is prescribed or called for, whether patent, trade-mark, scientific, or standard preparation!—from bromidia to iodia, from Victor's food to pancreatic emulsion, and from lactopeptine to ingluvin, from peptonized veal and beef to hydrolein! If Liebig could glance at the collection the sight of it would make him turn away with a mawkish and sickly feeling and curse the day when his soup and extract of beef first saw the light.

Those who have undertaken to reform existing abuses in pharmacy have assumed an herculean task with the labors of Sisyphus thrown in. Will they succeed? It is to be hoped so, but, candidly, I confess I doubt it.

The position is well taken and the aims very high, but some years ago I pursued similar ones, yet in my enthusiasm left the important fact out of the account that when I came into it the world was already given away; it was dried, cut and prepared and finished before me, and therefore, that to reform it, or to find fault with it, was, to say the least, foolish on my part. You see, my destiny was to settle, like an oyster, on the shore of Lake Michigan, not for the purpose to reform the shore, or to find fault with the lake, but to make for myself a home and to see to it that I was not covered up and smothered by the sands, nor washed away by the waves. Others were there before; many more came afterwards, oysters exactly like myself, only with this difference, that some were larger, others smaller. The position of an oyster in organized society is rather commonplace, and so it came that there were some who were not satisfied with it, and to distinguish themselves from the others they called themselves by an outlandish name, never heard of before; its phonetic sound was very similar to Farmercist, and since in organic nature everything grows by what it feeds on, they soon were not satisfied with that name or claim, but wanted it "registered," 'trade-marked," "patented," or whatever that means, and would you believe it, they actually succeeded. They had it "registered." It was last year, and they were even liberal enough to confer that sign-mark upon us also. But we are oysters still! Though a registered oyster now, yet I feel that I am sinking; the sands and the waves seem to take no notice of me; seem to care nothing for my sign-mark or for me; an eddy is forming about me; the registration badge has fallen out of my muzzle in the struggle for existence, but in this extremity I have caught hold of the recent reform movement, and will cling to it in the desperate hope that I may yet be saved.

## Laboratory Notes.

By A. B. Lyons, M. D., Chemist, Analytical Dept., Parke, Davis & Co., Detroit, Mich.

### I.—ON THE VALUATION OF ACONITE ROOT.

THERE were recently submitted to me, for examination, six samples of aconite root, offered for sale by prominent wholesale dealers in drugs. The results of the examination illustrate so well the necessity for scrutinizing closely all important drugs before purchasing, that I offer them here in detail.

Between Nos. 1, 2, and 3 there was very little to choose so far as external appearance could indicate. The roots were small, 25–60 millimetres long, most of them strongly wrinkled, and sound, with few tubers of a previous year's growth.

In No. 2 the roots were evidently selected with unusual care, and the price accordingly was 20 per cent. higher than that of the other two.

No. 4, labeled Chinese aconite, consisted of plump conical (fusiform) tubers, some of them with one or more small processes of a similar form, standing out nearly at right angles from the side of the main tuber. They were of pretty uniform size, 30 to 50 millimetres long, 12 to 15 millimetres in diameter. A small proportion only of the tubers were wrinkled, and those not strongly so. The interior was generally quite white, of a uniform texture, and a peculiar chalky appearance, abounding in starch.

No. 5, labeled German aconite, consisted of large tubers of the familiar form, 50 to 100 millimetres long, 15 to 30 millimetres in diameter, a large proportion of them the plump, porous roots of a previous year's growth.

No. 6 was a very promising specimen, resembling the first three, except in the circumstance that the roots were considerably larger, 35 to 85 millimetres in length.

The samples were reduced to a sufficiently fine powder, and 10 grams of each was packed in a suitable percolator, and exhausted with strong alcohol, the percolate in each case being brought to the measure of 100 cubic centimetres. Previous experience had shown that with care in the percolation, this amount of menstruum is sufficient for all practical purposes. Meanwhile, weighed samples of the powdered drug had been dried at a temperature of 100° C. to determine the amount of moisture.

Ten c. c. of each of the percolates was evaporated at 100°C., to determine the amount of extractive.

For determination of the alkaloids 50 c. c. was evaporated after the addition of 20 c. c. of distilled water and a few drops of hydrochloric acid until the spirit was completely driven off, the temperature not rising during this operation above 50°C. The fluid when cold was filtered, the residue in the evaporating dish dissolved in ether and treated repeatedly with acidulated water, to dissolve any alkaloid that might have been held in the portion insoluble in water. The washings were passed through the filter into the main filtrate and the whole evaporated carefully to a volume of about 5 c. c. This was then treated with Mayer's reagent, suitably diluted, and the amount

of alkaloid calculated by Duquesnel's constant, as corrected by Dragendorff (Chem. Werth-bestimmung einiger starke Droguen).

While the results are not claimed, of course, as scientifically exact, they approximate closely to the truth, and for the purposes of such an assay are all that could be desired.

The following table exhibits the results reached:

| No. | Moisture Per Cent. | Extractive by Str. Alcohol. | Extractive from Dry Drug. | Five Grains Required—Mayer's Reagent. | Aconitia Per Cent. | Aconitia in Dry Drug. | Relative Cost Per Pound. | Relative Cost per Unit of Aconitia. |
|---|---|---|---|---|---|---|---|---|
| 1 | 12.4 | 13. | 14.86 | 1. | .525 | .599 | 100 | 143 |
| 2 | 10.5 | 9.3 | 10.42 | .9 | .475 | .531 | 120 | 190 |
| 3 | 13. | 14.78 | 16.99 | 2. | 1.028 | 1.182 | 100 | 73 |
| 4 | 12.4 | 5.77 | 6.57 | .6 | .313 | .356 | 95 | 228 |
| 5 | 13.5 | 12.52 | 14.48 | .9 | .474 | .548 | 105 | 166 |
| 6 | 17.4 | 13.27 | 16.07 | .95 | .493 | .597 | 90 | 137 |

If aconite root were bought for the manufacture of aconitia, assuming for the moment that the "aconitia" of the several varieties here examined is identical, sample No. 4 would be more than three times as costly as No. 3, and No. 6, which is next in value to No. 3, would be nearly twice as expensive. The physician who prescribes aconite bases his calculations on the supposition that the drug will contain an average amount of the alkaloid, but he would surely not get the same effect from one grain of No. 4 as from one grain of No. 3.

Some standard, therefore, ought to be adopted so that the physician may graduate his dose, and the pharmacist adjust his preparation accordingly. I have assumed that aconite should show by Mayer's reagent, employed in the manner described, not less than six-tenths of one per cent. of aconitia, I think three-fourths of one per cent. would not be too high a standard for adoption, but of the six samples examined only one reached even the lower standard, and that one exceeds the higher standard by 35 per cent. If these several samples are allowed to pass as aconite root, to be dispensed on physicians' prescriptions in exact and often minute doses, we may not be surprised if scientific therapeutics finds itself baffled and discouraged.

But, some one says, possibly your mode of valuing the drug involves some fallacy which you have not suspected, or else this is altogether an exceptional instance. That the illustration I have chosen is a striking, and so a somewhat unusual one, I admit; it was chosen because it was striking, but it was chosen equally because it was an actual instance of the facts we meet with in investigations of this kind. That the results may be relied upon as substantially correct I have convinced myself by physiological experiment.

Dr. Squibb some years ago published his own method of estimating the value of any sample of aconite root. His practice was to take at random about ten of the roots and taste of each one, those only which produced masked and lasting numbness of the tongue being regarded as good, and the sample condemned if more than 20 or 30 per cent. of of roots failed to produce the effect. This method of making the test occupies too much time to be available in the comparison of any large number of samples, but I am in the habit of using a modification of it which I think is equally good for practical purposes, although, of course, vague in the information it furnishes.

I use for the physiological test one drop of the tincture made in the proportion of one in ten, applied to the tongue so that it shall have a fair opportunity to act. By the intensity and the duration of the effect produced one can judge pretty correctly of the value of a given sample. To those who have not the apparatus or the time for an assay of the drug, this mode of testing (tasting) aconite root commends itself by its simplicity; for some individuals a greater degree of dilution would perhaps be necessary or advisable. but knowing the principle, one needs only a little practice to become a connoisseur in aconite root. If there are any who need the warning, I say only in conclusion taste carefully, and do not swallow any of the drug if you have any regard for the laws which forbid cruelty to animals.

## Chionanthus Virginica.

By John A. Henning, M. D., Clermont, Indiana.

THIS is a small shrub growing from 5 to 10 feet high, found growing mostly in sandy and hilly land. It is found all the way from Pennsylvania to the state of Georgia. It is a beautiful and ornamental shrub, flowering in May and June. The flowers are almost snow-white. The leaves are from 4 to 6 inches wide, and from 10 to 12 long. The fruit is berry-like in appearance, and contains the seed.

It is also known in some parts of the country by the more common names, as snow flower, old man's beard, and fringe tree.

The bark of the root is the part used for medicinal purposes, though my opinion is that the virtue of its quality is also found in the leaves, if gathered just before it flowers. The bark of the root recently dried, should be made into a fluid extract, when it may be given in doses of from 10 to 20 minims, frequently repeated.

*Medical Properties and Uses.*—This comparatively new remedy has not found its way into our dispensatories; however, it is now used by a large number of physicians who are acquainted with its intrinsic value and therapeutical effect when judiciously administered, especially when its peculiar indications are known. It is tonic, diuretic, diaphoretic, and a mild aperient. More properly it had better be termed an alterative, in the true sense of the word, because it promotes nearly all secretions in the system, without producing debility, removing effete matter and worn out tissue through the natural emunctories of the system. It also restores the action of some organs, especially the liver, kidneys, and intestines. That is, it gives new life and vigor, enabling them to perform their physiological function, when partially deranged causing a diseased pathological condition.

It is an excellent remedy in jaundice when properly given, as verified in my own experience

in large numbers of cases under my care the last few years. It will stimulate the liver to action, causing an increased flow of bile, giving the organ vigor and strength. Then its secondary action is that it also stimulates the kidneys and skin to action, causing those organs to remove from the system the bilious matter which pervades it, causing the patient to have a yellow appearance. I do not propose to say that it is a specific in jaundice, but I do say, from personal experience, that it is the best single remedy found in the whole of the vegetable materia medica.

It is a good tonic only in that form of dyspepsia where the mucous membrane of the stomach is in an atonic condition, and the liver and small intestines are in a torpid condition. In malarial districts it is very common to find enlargement of the liver, resulting mostly from the chronic forms of intermittents. In such cases this remedy certainly stands at the head of all others towards curing such cases. A few years ago a patient presented himself for treatment, who had intermittent fever for a year, which resulted in an enlargement of the liver. Upon close examination I found the liver was so large, that it nearly filled half of the abdomen; and by the use of the fluid extract of chionanthus virginica a radical cure was effected in three months time. Its action on the spleen, when that organ is enlarged, is not so decisive, though it influences it some.

It is a very fair remedy in scrofula, where we find that there is imperfect digestion, torpor of the bowels, kidneys and skin, thus giving those organs more life, and normal power, enabling the system, to throw off the virus of scrofula, and prepare the system for better blood making, and increasing innervation. For the same reason it can be judiciously employed in the secondary form of syphilis. While it may not neutralize the poison in the least, yet it will enable the system to throw it off.

It is also a very fair remedy in some forms of skin diseases, such as herpes, eczema, psoriasis and roseola. But in such cases it must be used for a long time, as the remedy in question is somewhat slow in its action.

However, after repeated experience and close observation with this medicine, I think that in jaundice and hypertrophy of the liver, it is reliable in nearly all cases, and doubtless stands at the head of all other remedies for those pathological conditions. Its selecting tendencies is for the liver, kidneys and skin, stimulating those organs to normal action and renewing innervation. To go beyond this I think we have other remedies that will supercede it.

When we administer any remedy, we must know its action and behavior in the system, and unless we know this, we certainly are practicing more or less empiricism. Now-a-days it is very common, especially with new remedies, to overrate them, and to recommend them in certain diseases in which they have no influence. The profession should be more guarded, and in giving any remedy, we must closely observe its action and behavior in the system.

## Bicarbonate of Potassium and Bicarbonate of Sodium in Neuralgia and Muscular Rheumatism.

By J. M. Blackerby, M. D., Milford, Ky.

I HAVE used these drugs in combination for the relief and cure of the affections above named for several years, and with unvaried success.

If I am asked why they possess properties curative in neuralgia, I can only answer that my experience was for a considerable time empirical only. Often it was necessary to prescribe the drugs, one or both combined, in some form of disease demanding and calling for an alkaline treatment, a concomitant of which was neuralgia or muscular rheumatism, and on the cessation of the disease, and frequently before, I found the concomitant relieved or materially abated. This frequent effect at once decided me to investigate the "modus operandi" of its action and decide if I could the indications for its use. Soon an opportunity to test the effect of the drugs presented itself in a middle-aged lady suffering from trifacial neuralgia. I found this patient subject to frequent attacks of the disease and anxious for a remedy to give speedy relief, if I could not give her a prophylactic. I carefully examined into the symptoms and conditions present in her case and obtained the following indices: Pulse firm, hard, wiry, 98 to the minute. Tongue broad, flat and coated with a thin but pasty fur. Mucous membranes of mouth, nose and eyes of a pale color. Eyes watery, or seeming to swim in water. Urine high colored and rather scant, very ammoniacal in smell. Bowels nearly or quite regular and stools of a light clay color, occasionally changing to a brown. Sputa tough and viscid. With these indices before me and properly noted, I commenced the treatment by ordering the following:

℞ Bicarb. potassa., ʒ ss.
Bicarb. soda, ʒ j.
Mix and pulverize.

Of this mixture I directed her to take a teaspoonful dissolved in a glass of cold water and to repeat the dose every six hours. At my visit in the morning I found my patient entirely relieved. I then asked myself the reason for the cure. What conclusion must I come to? To my mind the evidence seemed in favor of an acid condition of the blood. I resolved to continue my experiments as occasion offered. As neuralgia is now of frequent occurrence, many opportunities offered to make thorough and satisfactory tests of the drugs, and may say, so far as I have proven them, with the most satisfactory results to many people suffering from this distressing disease; indeed, in the range of my practice it is a common occurrence for the people to call at my office, and even at the drug store in our place, and ask for an ounce of the neuralgia medicine; and indeed, so well has it established itself in minds of our people, that many keep an ounce of the remedy constantly on hand, and with the slightest premonition of an approaching attack they immediately resort to the mixture.

That it is always as successful in an attack of muscular rheumatism, I cannot positively assert;

but in every case of that disease I have been called on to treat, when I found the conditions as given above, I have not failed to cure one. Several months since a gentleman presented himself at my office, stating that he was troubled with pains in the right arm and in both legs; he thought he had rheumatism of some kind, and wished a cure; had taken blue pill and other remedies from another physician, but without benefit; used various liniments and external applications, but was no better. Though the pains were not severe enough to keep him from business, nor to prevent sleep, yet they were distressingly annoying, and he greatly desired relief. On a careful examination of his case, I found nearly all the symptoms as above enumerated present in his case, and told him I thought I could give him relief. I accordingly put up for him the above prescription, with directions to take a teaspoonful in a glass of cold water every four hours till he had taken four doses; then a dose, or glassful, every six hours, till cured. A short time after getting and taking the medicine I met with him, and on inquiry as to the result, he stated that when he had taken the first four spoonsful he felt that he was well, but to make the cure permanent, he remarked that he would continue the use of the powder for some time. This patient has not been troubled since with muscular rheumatism, neither has he had an attack of neuralgia, though his occupation, that of trader in stock, necessitates his exposure to much inclement weather.

Some four months since the writer, having been exposed to a cold rain and night air, was in a few days after attacked with muscular rheumatism of the left shoulder and arm, and after trying several remedies without benefit, obtained complete relief in two days after taking the soda preparation.

So well am I satisfied with this medicine, that in all cases of either disease with the above symptoms—or the more prominent of them—presenting, I prescribe it without doubt of its success.

Given, therefore, a case of neuralgia with the indications pointing to an acid condition of the blood, and I feel very sure of a cure every time; but the prescriber should not be mistaken in his diagnosis.

If this article shall be the means of relief to one sufferer from neuralgia, the writer will feel amply rewarded.

## Nitro-Glycerine in the Treatment of Anæmia of the Brain.

By F. E. Stewart, M. D., Ph. G., of New York City.

An important paper was read by Prof. Wm. A. Hammond, of New York, before the October meeting of the New York Neurological Society, on some of the therapeutical uses of nitro-glycerine. Dr. Hammond, guided by the following facts, has used this agent for the past two years: "If a drop of solution of nitro-glycerine in alcohol, in the proportion of one part in a hundred, be placed on the tip of the tongue, a sensation of fullness and pain in the head (mainly in the frontal region) is experienced in the course of three or four minutes. The fullness disappears in a short time. A dose of three or four drops of the strength mentioned produces headache of much greater severity, and of longer duration. The carotid and temporal arteries pulsate with increased force; the head feels as if it is about to burst open; the face becomes red; the action of the heart is augmented, and the respiration becomes more frequent. These symptoms are indicative of cardiac and vascular excitement and of cerebral hyperæmia. We should therefore, *a priori*, expect that nitro-glycerine would be useful in those cases in which it was desirable to stimulate the circulatory system, and to increase the amount of intracranial blood."

By the cephalohæmometer, an instrument devised by Drs. Hammond and S. Weir Mitchell, it has been demonstrated, in the most conclusive manner, that some drugs, such as bromide of potassium, lessen the amount of blood in the brain, and that other drugs, of which sulphate of quinine is on example, increase it. "This instrument consists of a brass, or iron, tube, nickle plated, which is received into a round hole made in the skull with a trephine. Both ends of this tube are open, but into the upper end is secured another brass or iron tube, the lower opening of which is closed by a piece of very thin sheet india-rubber, and the upper opening by a brass cap, into which is fastened a glass tube. The inner arrangement contains colored water. To this glass tube a scale is affixed. This second tube is screwed into the first till the thin india-rubber presses upon the dura mater, and the level of the colored water stands at **0**, which is in the middle of the scale. Now, when the quantity of blood in the brain is increased, the liquid rises in the tube, being pressed upward by the elevation of the thin rubber closing the lower opening; when the quantity of blood is lessened, the liquid falls by its own gravity."

Dr. Hammond says that although this instrument is intended for experiments on the lower animals, it enables us to arrive at very definite conclusions relative to the condition of the cerebral circulation in man.

In cerebral anæmia the quantity of blood in the brain is either reduced below the normal standard, or the quality of the circulating fluid is impoverished. In either case the nourishment of the organ is interfered with. The first named condition is either due to direct loss of blood, as in uterine hemorrhage, excessive bleeding from piles, nose bleed, chronic dysentery or diarrhœa, or other chronic discharges, malarial and other fevers, etc.; the second to disease of some organ concerned in blood making or to a general cachexia.

Insufficient nutrition, however, is probably one of the causes of cerebral anæmia most apt to be met with in general practice. Diseases of the digestive or assimilative organs, are very common, inducing dyspepsia, and in other ways interfering with the blood making process. The blood thus becomes poor in quality, and unfit to nourish the brain, and this great nerve center suffers in consequence, and with it not only the body to which the nerves are distributed, but the mind as well. In cerebral anæmia from impoverished nutrition the pathological condition of the brain is but a symptom of the general condition of the patient. There is a morbid diminution of the red globules of the blood; the power of the circulation is dimin-

ished; there is a deficiency of the functional energy of different organs due to want of blood and enervation; the temperature is lessened; the action of the heart is feeble; and the pulse is small, weak, and compressible. In cases of this kind strength of will and determination are usually greatly impaired, and the patient is not capable of the intellectual efforts which he is able to perform in health. Mental depression, and anxiety regarding health, are concomitant symptoms which often occur, accompanied with lassitude, and a feeling of utter incapacity for muscular or mental exertion of any kind. Such cases are by no means rare, and their treatment is often perplexing.

Dr. Hammond's suggestions with regard to nitro-glycerine seem to be very practical ones. Sick headache, of the anæmic variety, for instance, in which compression of the carotid artery on the painful side increases the pain, is immediately mitigated by this agent. But when compression relieves the pain the remedy is worse than useless. The dose given by Dr. Hammond in these cases is one drop of a solution of nitro-glycerine of the strength of one drop of the drug in one hundred drops of solution. This dose is repeated every fifteen minutes. He states that he has rarely been obliged to give three doses to insure relief.

But it is in epilepsy of the anæmic variety in which nitro-glycerine seems to have met with the most brilliant results in the hands of this investigator. Convulsions, eleptiform in character, may be produced both by cerebral anæmia, and cerebral hyperæmia, according to this author. This occurs when either condition involves the medulla oblongata; and when either condition involves the hemispheres loss of consciousness is the result. "We have, consequently, two kinds of epilepsy—the one due to anæmia, the other to congestion—and it is to this fact that is due the circumstance that sometimes the paroxysms are prevented by measures which tend to increase the amount of blood in the brain, and at others by remedies which exercise a contrary influence." In the cases referred to, one drop of the solution specified should be given three times a day, for a month; then the dose increased to three drops thrice daily, increasing one drop per dose with the beginning of each succeeding month. The effect of this treatment is to render less frequent the attacks of "epileptic vertigo" and generally to suppress them after a few months of treatment. But the treatment should be continued for some time after the attacks disappear.

In cases of cerebral anæmia due to a fault in the digestive, or assimilative systems, the treatment is, of course, more general. In such cases, nitro-glycerine will, of course, increase the cerebral circulation; but its use must be conjoined with other treatment to improve the blood condition. Nutritious alimentation is here indicated for the purpose of manufacturing good blood; tonics and stimulants, to render the digestive functions more active; and iron as a special remedy, the effect of which is often remarkable. To this should be added a regimen calculated to increase the energy of the assimilative functions, consisting of exercise in the open air, recreation, and measures calculated to restore a healthy action of the mind.

Nitro-glycerine is furnished by the pharmaceutical profession in several forms, the most eligible of which is probably pills or dragees, which range in strength from 1-200, 1-100, 1-50, 1-33, 1-25, and 1-10 of a grain each.

It is a noteworthy fact that workmen employed in handling nitro-glycerine, even in the form of a weak solution, or in pill mass, are effected by it most unpleasantly. These effects seem to be in corroboration of Dr. Hammond's report. My investigations have been conducted in the laboratory of Messrs. Parke, Davis & Co. They are as follows:

Mr. G. reports than an invoice of nitro-glycerine in the form of a 10 per cent. solution was received by him, and that for two days he was engaged in transferring it into bottles, for greater safety in storing. The first day he was afflicted with a dull pain in the head which increased as he continued the operation of bottling. There was throbbing of the temporal arteries, and the face was moderately flushed. The pain continued after leaving the laboratory, and sleeplessness was a marked symptom. For several days after handling this chemical he suffers with a continued, dull, unremitting headache. He also reports a former laboratory experience, where he was subject to frequent attacks of asthma, caused by handling ipecac. For this, a physician prescribed nitrite of amyl, which he used greatly to his relief. The comparative effects of these agents in his case, seem to show that they differ materially in their action. Nitrite of amyl, according to the testimony of Mr. G., is more transient in its effect. It produces flushing of the face to a greater degree. A feeling of fullness in the chest occurs, not experienced in the use of nitro-glycerine. Nitrite of amyl does not cause headache in his case, insomnia, or the disagreeable sensations which follow the nitro glycerine.

Dr. L., chemist, reports very similar effects following the handling of this solution of nitro-glycerine. In his case it causes headache also. The pain is dull and continuous, and lasts for some time afterwards. The effects greatly differ from those produced from nitrite of amyl. In handling the latter drug he does not experience pain in the head, but a feeling of congestion quite similar to that produced by a cold. Oppression of the chest is a marked symptom from the use of nitrite of amyl, but does not occur from nitro glycerine.

Mr. McG., who is engaged in preparing the mass for the pills, reports that both himself and his associates in his work are sufferers from headache, throbbing carotids, and temporals, and in some cases the head seems to swell across the temporal region. Nausea and vomiting frequently occur, but in time the latter symptoms disappear, and the system seems to acquire a tolerance for the drug. In the handling of it, however, no matter how often, headache is the result. The nausea resembles sea sickness, and is relieved by going out in the fresh air. The headache, however, continues for several days, and insomnia is a frequent symptom.

In the pill room a large number of girls are employed, and when they are engaged in the manufacture of nitro-glycerine pills, effects very similar to those reported above are noticed. The pills are made by the ordinary method, viz., rolled out by

hand. The girls are at first attacked with severe headache, flushed face, throbbing arteries, nausea, and vomiting, and are frequently compelled to leave the room and return home to recover from the effects of the drug. After a time a certain amount of tolerance is established, and the most severe symptoms in a great measure disappear, but headache is always a result of the handling of the mass in pill making, even to those who are accustomed to the operation.

## Notes on the Use of Cheken, Ustilago Maidis and Berberis Aquifolium.

By Will A. Johnson, M. D., Raleigh, Indiana.

CHEKEN.—Early in the past winter I secured a small quantity of the new remedy, cheken, and have had the opportunity of giving it a thorough test in chronic bronchitis, and in the irritative cough caused by common cold. As the result of my observations, I must say that it deserves a high rank among the therapeutic agents indicated in a catarrhal condition of the respiratory mucous membrane.

A favorite prescription of mine for ordinary winter cough is the following:

℞ Fl. ext. cheken, ʒ iss.
Fl. ext. collinsonia, ʒ i.
Syrup simpl., q. s. ʒ iv.

M. Sig.—Teaspoonful every 4 to 6 hours.

Cheken deserves a thorough trial.

*Ustilago Maidis*—I have used ustilago maidis in abortion, complicated with dangerous hemorrhage, caused by inertia of the uterus, with good success, after having utterly failed to rouse the womb to action with ergot. As a paturient, I think ustilago maidis far the superior of the two, as the contractions caused by the latter are intermittent, and more closely resemble natural labor pains.

*Berberis Aquifolium.*—Berberis aquifolium is all that is claimed for it as an alterative. I have cured with it a case of salt rheum that had resisted all other treatment for years. Have also used it in secondary syphilis, with gratifying results.

## Jamaica Dogwood in a Case of Strangulated Hernia.

By Dr. F. Fermier, Weisburg.

In the March number of the GAZETTE are many reports in regard to the merits of Jamaica dogwood as an anodyne; but none of these reports mentioned the effect of this drug in regard to incarcerated hernia. Therefore allow me to increase the list of the happy results of piscidia erythrina as an anodyne.

On the 17th of February I was called early in the morning to see I. M., a strong young man of about 26 years. Found him suffering the most intense pains caused by incarcerated hernia inguinalis. Failing to make the reposition per manum and leaning him head downward over the bed, I ordered fl. ext. Jamaica dogwood, a small teaspoonful. About a half hour afterwards the prolapsed intestines fell back with a kind of snap, and after a few hours sleep, accompanied with profuse sweat, got up and commenced to work as shoemaker and said he felt as well as ever.

## Abstracts from Meteorological Reports, Silver Cliff, Colorado.

By A. Comstock, M. D.

THE following is abstracted from the meteorological observations taken at this point during the months of January, February and March. I shall have occasion to refer to them in a future article:

ABOVE ZERO.

| 1882. | 8 A. M. | 5 P. M. |
|---|---|---|
| Jan. 1. | 30° clear. | 50° clear. |
| " 2. | 32° clear. | 50° clear. |
| " 3. | 38° clear. | 56° cloudy. |
| " 4. | 28° clear. | 49° clear. |
| " 5. | 37° cloudy. | 56° cloudy. |
| " 6. | 36° clear. | 52° clear. |
| " 7. | 34° clear. | 35° snow. |
| " 8. | 20° cloudy. | 50° clear. |
| " 9. | 4° clear. | 42° clear. |
| " 10. | 21° clear. | 50° clear. |
| " 11. | 20° clear. | 48° cloudy. |
| " 12. | 20° cloudy. | 26° cloudy. |
| " 13. | 8° clear. | 47° cloudy. |
| " 14. | 30° clear. | 51° clear. |
| " 15. | 30° clear. | 50° cloudy. |
| " 16. | 15° cloudy. | 36° cloudy; snow. |
| " 17. | 6° below zero; clear. | 52° cloudy. |
| " 18. | 20° (above) clear. | 52° clear. |
| " 19. | 30° clear. | 59° cloudy. |
| " 20. | 20° clear. | 60° clear. |
| " 21. | 25° clear. | 57° clear. |
| " 22. | 20° clear. | 60° clear. |
| " 23. | 30° cloudy. | 59° clear. |
| " 24. | 30° clear. | 50° cloudy. |
| " 25. | 30° cloudy. | 50° cloudy. |
| " 26. | 18° clear. | 52° clear. |
| " 27. | 18° clear. | 50° cloudy. |
| " 28. | 19° clear. | 40° cloudy. |
| " 29. | 20° cloudy. | 50° cloudy. |
| " 30. | 20° clear. | 48° clear. |
| " 31. | 18° clear. | 49° cloudy. |
| Feb. 1. | 18° | 50° |
| " 2. | 20° | 55° |
| " 3. | 18° | 59° |
| " 4. | 18° | 56° |
| " 5. | 20° | 56° |
| " 6. | 33° | 50° |
| " 7. | 29° | 62° |
| " 8. | 24° | 55° |
| " 9. | 30° | 66° |
| " 10. | 32° | 65° |
| " 11. | 32° | 55° |
| " 12. | 30° | 50° |
| " 13. | 18° | 49° |
| " 14. | 20° | 66° |
| " 15. | 20° | 65° |
| " 16. | 30° | 49° |
| " 17. | 26° | 49° |
| " 18. | 20° | 38° |
| " 19. | 20° | 39° |
| " 20. | 20° | 40° |
| " 21. | 14° | 45° |
| " 22. | 14° | 59° |
| " 23. | 24° | 60° |
| " 24. | 34° | 70° |
| " 25. | 34° | 73° |
| " 26. | 34° | 52° |
| " 27. | 40° | 60° |
| " 28. | 32° | 60° |
| Mar. 1. | 34° | 64° |
| " 2. | 36° | 62° |
| " 3. | 39° clear. | 70° |
| " 4. | 22° clear. | 60° |
| " 5. | 30° snow. | 40° |
| " 6. | 20° snow. | 42° |
| " 7. | 20° | 42° |
| " 8. | 29° | 62° |
| " 9. | 20° | 36° |
| " 10. | 18° | 40° |

| 1882. | 8 A. M. | | 5 P. M. | |
|---|---|---|---|---|
| " | 11. | 30° | 58° | |
| " | 12. | 30° | 50° | |
| " | 13. | 33° | 56° | |
| " | 14. | 30° | 58° | cloudy. |
| " | 15. | 38° | 60° | |
| " | 16. | 40° | 52° | |
| " | 17. | 30° | 45° | cloudy. |
| " | 18. | 37° | 52° | |
| " | 19. | 32° | 59° | |
| " | 20. | 30° | 36° | |
| " | 21. | 22° | 65° | |
| " | 22. | 29° | 68° | |
| " | 23. | 30° | 62° | |
| " | 24. | 32° | 66° | |
| " | 25. | 40° | 62° | |
| " | 26. | 42° | 46° | snow. |
| " | 27. | 28° | 70° | |
| " | 28. | 36° | 65° | |
| " | 29. | 45° | 70° | |
| " | 30. | 38° | 79° | |
| " | 31. | 36° | 78° | |

* February—Cloudy at sunrise on morning of 1st and 16th; cloudy at sunset evening of 26th, and snow fell two inches night of 26th and 27th; a "wind storm" on night of 17th, from 9 P. M. to 5 A. M., with terrific snow on the Rockies above timber line.

## Abstracts and Translations.

### Nitro-Glycerine.

Nitro-glycerine, which was discovered by Sobrero in 1847, was examined in that same year and again in 1848 by the America homœopathist, Chas. Hering, in the homœopathic fashion, and since that time has been incorporated into the homœopathic armamentarium under the name of glonoin It received no attention from allopathists until 1858, when the English physicians Field, Thorowgood and Braldy investigated it with regard to its physiological action and administered it, in different neuroses, in doses of one and two drops of a solution made in the proportion of one part to a hundred.

Fuller and Hanley fixed its therapeutic dose as high as 50 drops of such a solution.

At a more recent period, however, 1879, it is to Dr. William Murrell that we are indebted for rescuing this remedy from oblivion.

Basing his conclusions upon a series of investigations conducted upon 33 healthy persons, in which resemblance to the action of nitrite of amyl was noted, Murrell determined to employ nitro-glycerine in angina pectoris and met with unusually satisfactory results, not alone in securing a merely palliative measure in this new remedy, but also in affording the assurance of pronounced relief in so painful an affection.

Almost immediately upon the publication of Murrell's labors physiological research was inaugurated with a view to the further therapeutic value of nitro-glycerine. The laboratory of Grabowski, expressly furnished for this purpose a sample of this agent which was in the form of an alcoholic solution of 1 per cent. and it was exhibited in doses of from one to six drops, the experiments being made under the directions of Korcynski, by Janocha, a student of medicine, either upon himself principally, or upon other students and convalescents. Without here entering upon the theory of the action of nitro-glycerine, we proceed to state the results observed in individuals enjoying sound health.

It is proper, however, to remark at the outset, that the views of Murrell were confirmed in every particular. Nitro-glycerine operates in a special manner upon the circulatory system and the brain. Very soon after its administration, usually in from two to three minutes, accelerated action of the heart's impulse becomes stronger and its sounds louder, while the sphygmograph shows that the ascending line of its tracing approaches more closely a vertical position as well as being prolonged, and the angle formed by the ascending and descending sides of the figure is more acute. The pulse is augumented from eight to ten beats in frequency. The tension in the arterial vessels is thereby diminished, owing to the increased volume of blood which is forced into these cavities, and which is thus enabled to overcome the normal elasticity of their walls.

In many cases the finger will discover, in from 15 to 20 minutes, a dicrotic pulse. In some instances, the pulse was quite variable as to frequency, occasionally even intermitting. Those who were under its influence, never complained of heart throbs. The most marked effect upon the circulation follows its administration in from 3 to 15 minutes, and its influence entirely passes off in from 40 to 45 minutes, without leaving a trace of its presence.

Exhibited in a dose of 2 drops of a 1 per cent. solution, one is almost at once conscious of a slight transitory headache, accompanied with a sense of fullness and flashes of heat in the head and face. In large doses the pain in the head is more intense. After 6 drops of the solution, it is quite disagreeable, continuing for 10 or 15 minutes, and associated with moderate photophobia, very unpleasant feeling of tension in the head, palpitation and ringing in the ears, which seem to diminish at the end of every inspiration. As long as these symptoms continue, it is impossible to make any physical or mental exertion. There were no other symptoms deserving of special note, with the exception of increase in the quantity of urine, which is apparent within less than an hour—on an average, in a half hour—and amounts to 20 cc. The daily flow and the other physical and chemical peculiarities of the urine remain unchanged.

The therapeutic powers of this remedy were studied in 35 cases—23 men and 12 women—partly in the clinic and polyclinic, and partly in private practice.

Without enumerating the forms of disease, it is sufficient to say, that 18 gave positive results, 12 negative, and 5 doubtful ones; and it is, perhaps, worthy of remark, to add that the negative or doubtful results were found more frequently amongst women than men. As a rule, from one to four drops were given as a dose, and only exceptionally 10 to 15 of the above alcoholic solution. One patient with insufficiency of the semilunar valves and stenosis aortæ, took, of his own notion, in very painful attacks of angina pectoris, as high as 30 drops several times a day, when he found, after repeated small doses, only largely increased ones afforded him any relief in his cardiac seizures.

Nitro-glycerine, in its effects upon different

classes of disease, has been found to give the following results:

1. Six patients, suffering from paroxysms of spasmodic bronchitis consequent upon emphysema of the lungs, were able to prevent or shorten, at least, the attacks of difficult respiration in a few moments, by the use of nitro-glycerine, if taken at the beginning of the paroxysm. Where this was already well developed, its effect was less prompt, though still measurable. In the case of a sexagenerian, in which there were present very marked senile, pulmonary emphysema and chronic bronchial catarrh, coupled with dilatation of the heart and atheromatous degeneration of the blood-vessels, nitro-glycerine failed to relieve the nightly asthmatic paroxysms. Continued methodically two or three times a day, without regard to the period of recurrence of attacks, nitro-glycerine entirely dissipated them, after a variable interval, in 4 of the 6 asthmatic cases indicated.

2. In simple idiopathic asthma of nervous origin, the result was not so satisfactory. Of 13 cases, 7 exhibited no effect in its use; two of these, however, were of an hysterical nature. In 4 others, 2 of which were nervous asthmas, with unmistakable evidences of acute bronchial catarrh, its influence was doubtful, and only in 2 were there positive results. In both of these, nitro-glycerine, taken at the proper time, successfully anticipated or cut short the attacks, which, under protracted use of the remedy, returned much less frequently.

3. In 2 cases of great steno-cardiac distress accompanying aneurism of the aorta, nitro-glycerine acted very promptly, for the paroxysms seemed to yield at once to its powerful action, and, pursuing a longer course of treatment, one case enjoyed complete immunity from them.

4. In 3 cases of palpitation, the result was quite satisfactory; in 2 of these, moreover, of nervous origin, the throb disappeared entirely under its use, whilst in the third, where there was insufficiency of the semilunar valves, the severity of the attacks was greatly diminished by the daily exhibition of this remedy.

5. Of 6 cases of angina pectoris, 1 with atheroma and degeneration of the muscular tissue of the heart, gave doubtful results; but, in the others, the effect was so brilliantly efficacious that no other remedy can be compared with it. In a few moments after it was taken, the pang either entirely disappeared, or at least, was so much lessened that it was easily borne by the patients. This remedy is of like service as a prophylactic, when the angina pectoris is the result of structural changes in the vascular system, though in one instance, where the steno-cardiac attacks appeared to be rather of nervous origin, they yielded to the continuous employment of nitro-glycerine for 26 days in doses of 1, and later, 3 drops ter in die. A concurrent hemicrania also vanished under this treatment.

6. In one case of minor chorea in a young girl of chlorotic habit existing for two years, and to whom bromide of zinc had been given to no purpose, nitro-glycerine very soon controlled the abnormal movements, and in 25 days these entirely disappeared. The patient increased in weight 3 kilogrammes.

7. Nitro-glycerine proved of no avail in hysteria major, tremor mercurialis and diabetes mellitus. From the abridged statement of clinical observations it is clear that in all cases of angina pectoris, whether this be associated with valvular disease of the heart, atheromatous condition of the blood-vessels, degeneration of the muscular tissue of the heart, or constitutes a pure neurosis, nitro-glycerine possesses, undoubtedly, excellent palliative properties and really deserves the high praise bestowed upon it by Murrell, particularly as it appears to be able not only to relieve sudden attacks of heart-pang, but to completely prevent them, if they are the result of simple defective innervation. Our investigations have led us farther than Murrell in fixing the class of cases where nitro-glycerine is indicated, since they show that it is a valuable remedy in asthmatic paroxysms dependent on emphysema of the lungs, and in palpitation of the heart, especially where this is purely nervous, and that, moreover, by its continued use, these painful conditions are wholly removed. It is necessary, however, to remark that, paradoxical as it may seem, nitro-glycerine is of little efficiency in asthma consequent on disordered nerve force.

The effects of nitro-glycerine on the circulatory system when given as a therapeutic agent, were similar to those observed in physiological experiments, whilst the sphygmographic curves quite resembled the marking noted in persons in good health who were subjected to its influence. A diminution instead of an increase in the number of pulsations was noticed in two instances of patients with heart disease. Where nitro-glycerine displayed a favorable effect, patients did not complain of any special symptoms other than an occasional sense of fullness of the head and dizziness, accompanied sometimes with slight pain. It is also a noteworthy fact that the hemicrania in three cases of hysteria, nervous palpitation and emphysematous asthma very soon disappeared under the nitro-glycerine treatment.

These investigations into the efficacy of nitro-glycerine have opened a new field of inquiry for the therapeutist, and, upon strictly theoretical grounds, the suggestion is added that we have in this remarkable agent a trustworthy remedy in epilepsy, angiospastic neuroses, fainting fits and related diseases and conditions.—*Prof. Korcynski, in Wiener Med. Wochenschrift.*

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### Roasted Coffee as a Disinfectant.

Dr. Barbier, in the "Journal de Medecine et Pharmacie de l'Algerie" relates his first experience with roasted coffee as a disinfectant and presents it in a manner that leaves little room to doubt its efficacy in this regard.

Some nineteen or twenty yeaas ago his services were called into requisition as a medical expert, and in the performance of his duty he found himself one day in company with the magistrate of Roaune and his suite, at a country inn, in which a man had been assassinated the evening before. It was excessively hot, so much so as to surpass the highest temperature known to Algeria. The party was introduced into a closed chamber where the body of the victim lay on the ground, but they

were all seized with so alarming a sense of asphyxiation on entrance, that they incontinently beat a retreat and the physician was the first to lead the inglorious movement. In a moment, however, the magistrate, without being much disconcerted, asked for some ground coffee from the inn-keeper, who at once brought a plate full, and the worthy magistrate proceeded to liberally spread it over the cadaver, around the walls and the floor. Instantly the odor disappeared and the physician was enabled to make the autopsy without further inconvenience. The surprise of the medical authority at this unexpected change in the surroundings was only equaled by that of the legal light on learning that such a method of disinfection was unknown. Some time after, Dr. Barbier had occasion to make another autopsy upon the body of an infant which had been fully a week in the water, and he met with the same success in removing the intolerable effluvium. In another instance in which the remains of an old clergyman were exposed in a *chapelle ardente*, the mephitic exhalations present were completely neutralized by a quantity of Mocha coffee, much to the general astonishment.

Dr. Barbier expresses his regret that it had not occurred to him to use coffee, either in powder or decoction, at an earlier date, in the treatment of foul ulcers, or as an addition to the applications necessary after surgical operations; but he has recently given it a successful trial in a case of ulcer of the sacrum in an old Jew suffering from tabes, and intends, hereafter, to replace the usual classical combinations of charcoal, quinine and chloride of lime in poultices by this new agent, wherever these last have been applicable, as in all ulcers of a sluggish nature, anthrax, etc. It is to be further regretted, he feels, that the delicious aromatic principle of coffee should be lost in the process of torrefaction, and an effort should be made to utilize it as much as possible in purifying our households with it.

Dr. Barbier notes also the neutralizing effects of coffee in the narcotism produced by tobacco and other noxious *solaneæ*. There is no better antidote. Every one addicted to smoking knows how quickly the narcotic drowsiness frequently experienced is dissipated by half a cupful of that beverage. Whether this useful berry exhibits its virtue as a disinfectant by reason of simple absorbing powers, rather than any chemical action, is not known, but its usefulness as a neutralizing agent cannot be questioned.—*La France Medicale.*

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### The Treatment of Hydrophobia with Hoang-nan.

M. Gingeot makes a communication upon this subject which he closes with the following conclusions:

1. It must be investigated by clinical studies whether the opinion believed at Tonquin of the effectiveness of hoang-nan in hydrophobia can be verified.

2. The oriental practice, which consists in administering the remedy by the mouth must be rejected, first on account of dysphagia, then on account of the eventuality of causing vomiting.

3. The best mode of administration seems to be hypodermic injection of an aqueous solution 1 to 10 of an alcoholic extract of hoang-nan; each cubic centimeter of this solution representing probably about three of the pills which the Tonquinese use.

4. The injections should be given repeatedly at short intervals in the same manner as the pills would be given, when the oriental process is followed.

5. The maximum dose not being indicated in advance, the injections should not definitely be suspended before they have produced phenomena of intolerance, the appearance of which coincides, i seems, with the expected therapeutic effects.

Mr. Dujardin-Beaumetz had to report on this question of hydrophobia to the hygienic council. As Mr. Gingeot remarks, the medium of the stomach is a bad one; the only good way is by hypodermi injection.

The false angustura gives a composition identical with that of hoang-nan, as far as analysis and vegetable structure are concerned.

Treatment by steam-bath, 28 men and women died of hydrophobia during 1881. All the experiments which have been tried remained without results. Mr. Pasteur reclaims the system of hot, sweating rooms as employed in Russia. A man is bitten by a rabid dog; he represents himself to the "hammam" who refuses to receive him; Mr Pasteur intervenes, but the man dies in the mean time.

Individuals bitten through their clothing are generally not subject to accidents; those however who are bitten direct on uncovered places of the body die almost always from hydrophobia. I have had occasion to observe a rather curious fact: Three members of the same family were bitten by their dog; which then ran away from the house. The following morning they learn officially that the dog was rabid. Their anxiety is easily imagined. I submit them to a treatment with garlic and steam baths, without, however, calculating myself on the success of this treatment. Nevertheless six months have passed, and no signs of disease have returned.

Unfortunately, in all cases where the hydrophobia is a declared fact, it has not been possible so far to report a single cure. The experiments made on dogs, at Alfort, with vulviline, have shown that this substance prevented the manifestation of hydrophobia, but not death; the animals die only in a kind of somnolence, without showing attacks of hydrophobia.

The experiments on rabbits are very difficult and complicated, because the rabbit, in consequence of a rabid inoculation, can die in 48 hours of this blood disease discovered by Mr. Pasteur, of "pastorine," in 5 days of septicemia, or in 10 or 15 days of hydrophobia. Experiments should be made on dogs. To-day, Mr. Pasteur determines the hydrophobia by introducing parts of the nervous system of a rabid dog into the meninges of the animal to be experimented upon. All the therapeutic experiments made on man have remained without results so far. One of our colleagues has had the good idea to have recourse to Faficher's

tube to make hydrophobes drink.—Dr. A. Gubler, in *Journal de Therapeutique*, No. 4, 1882, 159.—*Sociétie Medicale des Hopitaux*, Jan. 27, 1882, *in Gazette des Hopitaux.*

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### Herpes Circinatus and its Treatment with Goa Powder, Pulvis Araroba or Po-baia.

According to the author as well as to Mr. Hardy and the French dermatologists Herpes circinatus is always a parasitical affection. It is due to the presence in the epidermis or the hair of a trichophyte of the family of the orthrosporeæ, tribe of the torulaceæ. Often it coincides with plaques of herpes baring hairy skin, with different lesions of parasitical sycosis. These are eruptions of the same nature, caused by the same parasite, and the difference of the appearance depends only upon the seat of the disease. After having indicated the causes described, the lesions and the symptoms of Herpes circinatus, having shown its extensive progress during months and year, its frequent return after an apparent cure, Mr. Lasson enumerates the different parasiticides which have been applied to it with varied success: The oil of cade, mineral and sublimed turpeth, (Dagin) the sulphur, the sublimate, camphor, and the sulph. of mercury (Hardy), calomel (Hebra), benzine (Neumann) cassia alata, etc.

The powder of araroba or the powder of Bahia (po-baia of Corhinchina) alone gives a rapid cure and prevents recurrences, as is proved by the nine observations gathered by the author from very numerous cases which he has had to treat. Besides all physicians of the navy who have had occasion to use this remedy could not recommend it. We possess but very little information about araroba which is received at Baoia from the interior of Brazil in irregular crushed fragments of a reddish-brown color. The histological examination of these fragments shows that they belong to the most external layer of the bark of a tree of great size, perhaps belonging to the family of Leguminosæ. As regards the goa powder itself it owes its real activity to the chrysophanic acid and which it contains in abundance. A chemical analysis has not revealed any trace of alkaloids. One marked characteristic of this drug lays in the fact that it leaves a violet color stain on linen which does not disappear on washing the same.

The following is the manner of applying this remedy. Take some goa powder with the ball of the thumb [pulp of the indicator (extensor indicis)] and rub it on the spot of the Herpes circinatus in such manner as to break the vesicles. This operation is repeated two or three times in succession and the last time use a gentle pressure to make as much of the powder as possible adhere. Since this powder has a very irritating effect on the eyes and might end in troublesome inflammation of the conjunctiva, precaution must be used in employing it on the face, and the hands ought to be well washed after having handled it. All its reaction is limited to a feeling of heat and a redness of the rubbed spot, without its causing any pain. After 2 or 3 days, and frequently after the first application the cure is definite.

The araroba powder can also be used in form of an ointment, as a glycerole or with vaseline.—Dr. Lasson, Paris, July 1881, in *Journal de Therapeutique de A. Gubler*, Feb. 10, 1882.

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### Grindelia Robusta in Asthma.

The grindelia robusta, an asteroidea growing on the slopes of the west coast of America, which is used in those regions as the safest remedy against asthma, has of late attracted the attention of physicians in an increased degree. In favor of this new remedial plant with reference to the therapeutic effects, it is claimed that the plant is not numbered among the narcotics, as the solaneas (hyoscyamus, stramonium, etc.,) which have been used heretofore, but that it comes from a family which altogether furnishes us "hervica." The grindelia robusta is, according to experience, the most effective species. The resin is an essential part of its effectiveness.

Quantities of this resin taken in proportion to the quantity of tobacco used, were employed to impregnate well nitred tobacco, and from this cigarettes were formed, which after long observations during several months have always satisfactorily benefitted those asthmatics which have used them. The use of these cigarettes, which are easily lit and either smoked or the smoke of which is fanned towards the patient, is recommended by the author for every patient, even for non-smokers (ladies) as the cigarette once lit, on account of the quantity of saltpeter with which it is impregnated, will continue to glow and develop smoke.—Von Bombelon (Bergen auf Rügen), *Deutsche Med. Wochenschrift*, 1881, 48.—*Medicinisch-Chirurgische Rundschau, Wien, Austria*, 1882, 145.

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### The use of Curare in the Treatment of Epilepsy, by Prof. Edlefsen, of Kiel.

The author has tried curare in a certain number of cases of inveterate epilepsy, in order to compare the results with those reached by the use of bromide of potassium and atropine.

The curare has been administered as follows:

℞ Curare, 50 centigrammes,
Aqua destill., 5 grammes,
Acid hydrochlor, 1 gtt.

Digest during 24 hours and filter.

Of this solution, the author injected, every fifth day, one-third or four-tenths of a Pravaz syringe. These injections caused neither very much pain nor local inflammatory reaction. There never appeared any symptoms of intoxication.

If the favorable action of curare do not manifest itself after the fourth or fifth injection this medication must be renounced.

The following are the results gained by Edlefsen:

In two cases of hystero-epilepsy, the medication has had no effect. In 13 cases of essential epilepsy, mostly inveterate cases, six patients were not benefitted, three were definitely cured, three others have seen their attacks much diminished in frequency and intensity; the last case was on the way to cure. —Dr A. Gubler, in *Journal de Thérapeutique*, Feb. 25, 1882.—*Med. Chir. Rundschau*, No. 1881.)

# The Therapeutic Gazette

WM. BRODIE, M. D., Editor.

F. E. STEWART, Ph, G., M. D., Associate Editor.

DETROIT, MICH., MAY 15, 1882.

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## Enlightened Therapeutics.

THE division of the human family, according to their mental, moral and social condition, into savage, civilized and enlightened races, not inaptly illustrates the evolution of therapeutics. In the earliest times therapeutics were purely empirical (savage); succeeding this we have the era of what has been appropriately termed rational (civilized) empiricism, and latterly we indulge the hope that we have entered the era of physiological (enlightened) therapeutics. Therapeutics, moreover, are so intimately associated with the development of the materia medica that we may, for our present purpose, very appropriately consider the latter, and each ingredient thereof, as passing through the same gradations in their development. This is indeed the natural history of every drug of importance, and all attempts to reverse the order have been failures. The first employment of a drug has almost invariably been either accidental or uninfluenced by any process of reasoning, following which it has been empirically administered under circumstances which have been, as nearly as has been remembered, identical with those under which it was originally found to be followed by desirable results. Such employment remained for an indefinite time in the hands of the laity until eventually the profession, becoming cognizant of the success which followed its empirical administration in their hands, have adopted it for trial, and have finally learned to reason between its action in previous cases and its applicability to existing conditions. In course of time this knowledge ceased to be satisfactory and the "how" of its action is demanded. This latter and fuller knowledge can alone be determined by physiological experiment, that is, by ascertaining the precise method of the action of the drug on the tissues unaffected by the disturbing element or condition, disease.

Notwithstanding our boasted advancement in medicine, it must appear on an examination of the status of our materia medica and therapeutics, that we have made comparatively little progress in physiological therapeutics. The great bulk of the articles of our materia medica are prescribed at best after a rational empiricism. A few have been examined after the physiological (enlightened) method, but they are only those which through the high esteem which they have won through their empirical administration, have forced themselves upon the attention of the searchers after the more exact facts in medical science. The demand of the times is for a general advance all along the line of the drugs which have for years, and in some instances for a century, been prescribed after the most empirical fashion. It would astonish, and frequently amuse any one who will take the pains to compare the works on materia medica of the last century with the standard works of to-day. Although the language is somewhat quaint, it covers essentially the same properties of many of our most familiar drugs which are described in more ornate terms in our present treatises. In many instances properties are ascribed to drugs in the old books and perpetuated in the new, which, we venture to assert, have never been detected or suspected by one in a thousand of the practitioners who have for years prescribed them. So strong is fashion in medicine that unless it be offset by incontrovertible facts, it will be blindly followed to the end. The element *vis medicatrix naturæ* so frequently overshadows the effect of the drug, that the discrepancy between its properties as described and those properties as they really exist, is very apt to be overlooked. The only hope for advancement, that is, for ascertaining what a drug really is, in and of itself, is in experimentation with it under circumstances in which it is uninfluenced by that beneficient effort on the part of nature to restore the equilibrium of the system which has been disturbed by disease. When the essential properties of the drug have been determined, then and then only, can it be intelligently selected for introduction into the system as an aid to the efforts of nature to set herself right.

There have of late years been introduced to the profession a number of new drugs in regard to which the above general suggestions would seem to be peculiarly applicable. In the vast majority of instances these have been known to and empirically prescribed by the natives of their habitat, for time out of mind. The penetrating enterprise of the manufacturing pharmacists has discovered them in this condition and has placed them in eligible form in the hand of the medical profession, who have seasoned their empirical prescription of them with reason, and have in many instances through close observation of their effects, even in disease, formed a tolerably clear conception of their essential physiological properties. Doubtless many of these newer drugs possess valuable properties which have not yet been suspected, and which can never be detected except through physiological investigation. The guides to this investigation have already been furnished in the many years and voluminous reports of the empirical and rational-empirical employment of these drugs. It now but remains to determine the exact place to which these are entitled, how much

of the favorable results, in the reports of which contemporary literature abounds, is due to inherent property and how much is the result of nature's efforts in the individual cases reported. Here is a rich field for investigation, and one which has been absolutely uncultivated. He who undertakes its development has before him both the promise of renown and the reward which attends all efforts toward the amelioration of human suffering.

## The New York State Code of Ethics.

THE profession has been considerably agog for the past couple of months on the subject of the code of ethics which the Medical Society of the State of New York have set up for the guidance of its members. This new code contains some rules so directly counter to some embodied in the code promulgated by the American Medical Association as to make its adoption by the State an act of rebellion and secession from the National Association. In many respects the new code is commendable and while much shorter than the national code, is still much more expressive and comprehensive on questions at present demanding professional attention. This is notably so as regards the subject of proprietary medicines; it contains an admirable crystallization of advanced professional opinion on this matter.

The point, however, in which it differs most essentially and radically from the national code, is that covering the question of consultation with "irregulars," so called. It will be remembered that in New York the medical profession has secured recognition by the state, being legalized by an act of the legislature. This medical act, however, makes no distinction, as between the different "pathies," but places all who have secured a diploma from any medical college legally organized under state law on the same platform. A "legally qualified practitioner" in New York state may, therefore, be an eclectic or "allopath," or homœopath, or vitopath, or hydropath, or electropath, or what not. He may, moreover, be neither of these, but a nondescript and a veritable fraud in his methods. In view of this condition of affairs, it is not at all strange that the following clause in the new code should have aroused the opposition which it has in all parts of the Union: "Members of the Medical Society of the State of New York, and of the medical societies in affiliation therewith, *may meet in consultation legally qualified practitioners of medicine.* Emergencies may occur in which all restrictions should, in the judgment of the practitioner, yield to the demands of humanity." This clause is a deft union of humanity with a license to practices which must cause a demolition of the bulwarks which the national code, backed up by professional sentiment, has interposed between honorable and dishonorable medical practitioners. It is not strange, we say, that this clause has condemned the new code in the eyes of the profession, from the Penobscot to the Rio Grande, and has called forth the unanimous denunciation of the journalistic exponents of regular medicine, the Medical Record, of New York, alone excepted. The Medical Record prides itself on its standing alone in the matter, and seeks to persuade itself that it is the only champion of "liberality" in the regular ranks.

It may be a mere conceit, but we have always prided ourselves on our liberality, and hope we have never allowed a purely ethical consideration to interfere with the claims of humanity. But in spite of this we are obliged to dissent from this clause of the new code. There must be a line drawn somewhere between medicine proper and quackery, but the new instrument has abolished all lines and allows a miscegenation which can benefit neither quackery nor the public, and is dishonoring to a noble profession. We condemn no man for his views on therapeutics. In the as yet undeveloped condition of this branch of medicine there must of necessity be differences of opinion and who dares to say that his views are alone right? We honor the man who has "the courage of his convictions" even though we may not be able to agree with him, but we contemn him who trades on human weakness and ignorance. There are "legalized practitioners" under the New York law to associate with whom in practice would be degrading, and any code which permits such association is one to be repudiated by the whole nature of the truly liberal physician. This cause of the new code is specious in the extreme. We may concede its spirit to be praiseworthy, but it opens the door to abuses which must be degrading.

## Remedies in Rheumatism.

IT has been said that the disease for which the greatest number of certain cures are recommended, is the most difficult of cure. Certainly as applied to rheumatism this saying is almost literally true, for if there is a disease which is the opprobrium of medicine that disease is rheumatism the list of "sure cures" for which is well-nigh interminable. In spite of the wealth of research into the materia medica for "anti-rheumatics," in spite of the investigation into the etiology of the disease, and of the painstaking study of its pathology, a large proportion of the profession incline to Abernethy's opinion that the best remedy for rheumatism is "six weeks." The untiring study, keenness of observation, patient investigation and plodding research, which are so characteristic of modern scientific workers, have done much to make medicine more than an empirical exhibition of drugs. They have succeeded in vesting every branch of medicine, therapeutics alone excepted, with the dignity of science. In the therapy of some diseases, too, they have done much, but at most their results have been but a development and enlightenment of empirical methods long previously in vogue. In the matter of rheumatism we think we know almost everything pertaining to it—its etiology, history, pathology and diagnosis—but are met with a barrier, which has as yet been but very unsatisfactorily scaled, when we touch on its therapy. The name of the remedies and methods of treatment which have been advised, even from professional sources, is legion, but all which have been weighed in the balance of actual experience have been found wanting in some particular. Of recent years salicylic acid has probably been more extensively tried than any one drug. At one time it was hoped that in this article we had at last found what had long been looked for, had at last supplied the long-felt want. The crucial tests of several years' experience have, however, revealed the

weak spots in the armor of this drug and it is no longer regarded as the *sine qua non* in rheumatism; the indications, indeed, are that fickle fashion, which was largely instrumental in securing to it its notoriety, is beginning to turn its back on it, and to be casting about for some new favorite.

Among the newer agents which are asking the profession for a trial, is manacâ. This drug has long occupied a prominent place in the pharmacopœia of Brazil, but has but recently found its way to this country. It is held in high esteem in that country as a remedy in rheumatism, among other diseases more or less zymotic in their nature. Its *modus operandi* does not yet appear to be fully understood, but it is classed under the somewhat indefinite head of "alteratives,"—medicines which modify the nutrition of the body without producing any antecedent phenomena (Stillé). The trials to which it has been subjected in this country have not yet sufficiently fixed its place as a remedy in rheumatism. Numerous cases of its successful employment have been reported, but the general result has been modified by failures. From the facts as observed, it would seem that it is a remedy of value in properly selected cases, although it does not yet appear what are the special conditions under which its influence is most marked. The evidence thus far seems to indicate its especial applicability to the more chronic and subacute types of the disease, there probably being remedies already in the medical armamentarium better suited to the acute inflammatory form, in which there is especial acidity in the reaction of the blood.

The present is a time peculiarly adapted to a trial of this new drug. We think the evidence already furnished shows it to be an agent of properties sufficiently decided to demand such attention from the profession as will direct its use into such definite channels as will result in its accomplishment of the most good. In the midst of the confusion in the therapeutics of rheumatism which the introduction of salicylic acid for a time allayed, but which is beginning, with the decadence of this drug in professional favor, to again appear, it would seem to be a peculiarly appropriate time for a thorough and systematic trial of manacâ.

## Professional Sentiment in the South.

WE notice the following endorsement of the action recently taken by the New York State Medical Society, in so far as it relates to patented and copyrighted nostrums. We are glad to find that the profession in other parts of the country are waking up to meet the issue. The endorsement was the action of the Tri-state Medical Association at the recent meeting held at Memphis, Tenn.:

WHEREAS, The endorsement of patent and proprietary pharmaceutical preparations by physicians is a growing evil in the profession; therefore be it

*Resolved*, That the following paragraph from the recently adopted Code of Ethics of the New York State Medical Society, be adopted as the sense of this society:

"It is also reprehensible for physicians to give certificates attesting the efficacy of patent medical, or surgical appliances, or of patented, copyrighted, or secret medicines, or of proprietary drugs, medicines, wines, mineral waters, etc., etc."

HEBER JONES, M. D., Secretary.

## Errata.

THE price for Morse's "New Therapeutical Agents" is $2 per volume, instead of $1.25 as quoted on advertising page 3 of this journal.

## Book Reviews and Notices.

**Frozen Sections from a Child.** By Thomas Dwight, M. D., Instructor in Topographical Anatomy and Histology in Harvard University; Fellow of the American Academy of Arts and Sciences; Surgeon at the Carney Hospital. Fifteen drawings from Nature by H. P. Quincy, M. D.
New York: Wm. Wood & Co. 1881.

This work was prepared by Dr. Dwight, author of a work on frozen sections from the head, which has received deserved attention from the profession. The advantage of frozen sections as a means of studying anatomy becomes apparent to anyone who has examined the drawings prepared under the direction of Dr. Dwight. They are of great value in conveying an idea of the exact location and relations of various organs composing the anatomy of the human body. In describing the process by which these sections are made the author tells us that salt and ice or snow may answer the purpose, but a temperature below zero is best. The parts to be examined should be frozen hard as a rock, and the sections made with a fine saw in a cold room. Care must be taken to brush away the fine saw dust which obscures the section. Hot water poured over the section will do that thoroughly and secure the parts in good shape for study. The fifteen plates in the work are made from drawings of transverse sections embracing the neck, chest, abdomen and pelvis. Careful descriptions of the limits of each section and of the anatomy exposed to view, accompany each plate. Students whose knowledge of the anatomy of these parts was obtained by the usual methods of dissection will be greatly interested in this new method of studying the location and relations of the viscera. Nerves, fascia and like small organs are located in the sections with some trouble, but the satisfaction of knowing that the knowledge thus obtained is correct amply repays the pains. The plates are very distinct, the names of organs are distinctly written in the margins of the plate and indicate at once the location of the organ named. The descriptions embraced in the text are printed in large clear type and are in brief concise style. The printer and binder have done their work in the same thorough manner that the author and artist have. We commend the work as a valuable addition to the library of the student and practitioner —a work that should be consulted often.

H. C. W.

**Lectures on Diseases of Children.** A handbook for Physicians and Students By Dr. Edward Henock, Director of the Clinic and Polyclinic for Diseases of Children in the Royal Charité, and Professor in the University of Berlin
New York: William Wood & Co., 27 Great Jones street; Detroit: Thorndike Nourse.

This is the March number, or volume 3 of Wood's Library of Standard Medical Authors for 1882.

This book is almost exclusively the personal experience of the author, collected through a practice of 37 years in an almost uninterrupted dispensary service in the field of diseases of children.

The author does not claim to give a description or even mention of all the morbid processes occurring in childhood. The subject of the work is formed by those diseases of childhood alone which are distinguished from similar affections of the adult life

by a preponderating frequency or by peculiarities in their symptomatology—for that reason variola, which has become almost exceptional in children at the present time, has been excluded. Vaccination is not discussed, for the reason that already innumerable papers, and even treatises, have been published on the subject, to which he has nothing to add. It is a book of personal experience, and in this respect differs from other works on the subject. In discussing the different subjects, cases are given in explanation, thus fixing in the reader's mind a tangible illustration. The subject is considered in ten parts. 1. Diseases of the New-Born. 2. Diseases of Infancy. 3. Diseases of the Nervous System. 4. Diseases of the Respiratory Organs. 5. Of the Circulatory Organs. 6. Of the Digestive Organs. 7. Of the Uropoëtic Organs. 8. Infectious Diseases. 9. Constitutional Diseases. 10. Diseases of the Skin.

Instead of giving his prescriptions in the text, a formulary has been added, the text reference being p. 1–p. 2. We find only one real objection to the book, and that is the adoption of the metric system, without any reference to the system so long in use. The translator has made a great mistake in not conforming to the general usage of the profession in this matter. It may be asked why another work on diseases of children should so soon follow that of Ellis—on children—in the first year's publication. The present volume gives the German idea, from the pen of an independent observer, and this and nothing more is a satisfactory reason.

**Illustrations of Dissections,** in a series of original colored plates, the size of life, representing the dissections of the human body. By George Vines Ellis, Professor of Anatomy in University College, London, and G. H. Ford, Esq. The drawings are from nature by Mr. Ford, from dissections by Prof. Ellis. (Reduced on a uniform scale and reproduced in fac simile, expressly for Wood's Library of Standard Medical Authors.) Vol. 2, second edition.
New York: Wm. Wood & Co., 27 Great Jones street. 1882.

This volume is the February number of the series for 1882, and completes the subject. In our last number we had only space to call the attention of our readers to its issue and to commend the publishers for continuing the series. In the two volumes there are fifty-eight colored plates, each representing some portion of the human body. Only such dissections were prepared for the drawings as may be commonly seen in the dissecting room. Delineations of the ligaments, the viscera of the cavities of the body and the organs of the senses are not included. The part of the body to be illustrated is divided into suitable stages or regions, and the muscles, blood-vessels and nerves of each region are shown in layers in the natural order of succession, so that their mutual connections may be brought before the eye at one and the same time.

In the original work the plates appeared in an atlas separate from the text, but in the volume before us they are bound with it, and the whole so arranged that the description follows each plate. The physician or surgeon has therefore only to look in the index for the subject he wishes to examine, and he is carried at once to a dissecting room in his office, when his eye and his memory can be refreshed without the necessity of the dead body.

The work is a capital addition to a useful medical library and speaks well of the judgement of the publishers in making it the initial volume for 1882.

**A Clinical Hand-Book on the Diseases of Women.** By W. Symington Brown, M. D., Member of Gynecological Society of Boston; Fellow of the Mass Medical Society, etc.
"The highest aim of our art must be the greatest possible generalization of diseases, and the greatest possible individualization of our patients."
New York: William Wood & Co. 1882.

There is very little of anything new or instructive in this work that cannot be found in other books in our library. In fact, the author does not claim originality, but states his effort has been to "concentrate the best that has been written on each subject, including the old masters."

In its preparation, we are informed, that 70 different books have been consulted, and 40 periodicals and pamphlets. It is possible this labor may be rewarded and appreciated by the student, and such members of the profession who have no libraries and take no journals.

The author gives himself away in his preface in stating his indebtedness to Dr. Fordyce Barker, Ziemssen's Cyclopœdia, Van Buren & Keyes, Spencer Wells, Sims, Emmett, Thomas, Skene, Goodell, and Marcy; for the fact is any one who has read the writings of the above gentlemen, knows all that is in the work before us.

The most that can be said in its favor is its convenience, and the belief that the opinion of the authors and writers consulted have been conscientiously reported. The publishers have issued it in first-class style.

**Marriage and Parentage,** and the sanitary and physiological laws for the production of children of finer health and greater ability. By a physician and sanitarian. "The virtues of men and women, as well as their vices, may descend to their children."
New York: M. L. Holbrook & Co. 1882.

The author's name to his book has much the same bearing as an authentic signature to a bank check. This name the author before us has failed to give. If it is meritorious, he should have the credit, and vice versa. It is evidently written for public advantage, as upon examination we find nothing but what the learned physician already knows. We cannot see that it will do any harm even if it not promotive of much good. We have no doubt but that it will meet with a ready sale.

**Department of Agriculture.** Special report, No. 34. Contagious Diseases of Domesticated Animals—continuation of investigation by Department of Agriculture, Washington. U. S. Government Printing Office. Compliments of H. W. Lord, Member of Congress First District of Michigan.

This is a very valuable report on contagious diseases of animals, and handsomely illustrates the pathological conditions found in many forms of diseases. There is in it much of interest to the medical profession, and we would advise our readers to request a copy from their member of Congress. Our thanks are due to Hon. Henry W. Lord for ours.

**Martin's Chemists' and Druggists' Bulletin and Medical Advocate.** Monthly; $1 per annum; 46 Cortland St., New York City.

A very cheap and useful journal of its kind. We have no hesitancy in recommending it to both druggists and physicians, especially those of the latter who practice in the country. Please exchange and send back numbers.

**The American Pharmacist,** New York, 72 William St.; weekly; $2 per annum. Vol. 1, No. 12.

A really good journal on the subject of pharmacy, and as such we cordially commend it to the profession. Please exchange and send back numbers.

**Anæsthesia and Non-Anæsthesia in the Extraction of Cataract,** with some practical suggestions regarding the performance of this operation, and comparative statistics of two hundred cases. By Hasked Derby, M. D., Surgeon to the Massachusetts Charitable Eye and Ear Infirmary, to the Carney Hospital, etc., etc. Cambridge, 1882.

**The Importance of Introducing** the Study of Hygiene into the Public and Other Schools. Address on the 48th Commencement Day, March 29, 1882, of the Medical Department of the University of Louisiana. By Sanford E. Chaill, M. D., Professor of Physiology, etc. Reprint from the April number, 1882, of the New Orleans Medical and Surgical Journal.

**An Act** Amending and Re-Enacting Chapter 150 of the Code of West Virginia. Concerning the public health. Passed March 13, 1882.
Compliments of Dr. Jas. E. Reeves, Secretary State Board of Health, Wheeling, W. Va.

**Infant Feeding and Infant Foods.** The anniversary address delivered before the New York State Medical Society, Feb. 2d, 1882, by A. Jacobi, M. D., President of the Society. Reprint from the Medical News, Feb. 18th, 1882. Philadelphia.

**A Catalogue of Books,** published by Houghton, Mifflin & Co., Boston, No. 4 Park street. It is very handsomely issued, and the publishers will be pleased to mail a copy of it to any address on application, without charge.

**The Systematic Study of the Causes of Sickness and Deaths.** A paper by Henry B. Baker, M. D., of Lansing, Mich., and Secretary of the Michigan State Board of Health.

**Laceration of the Perineum.** From the Obstetrical Gazette. Abortion and its lessons. Reprint from Michigan Medical News, By O. E. Herrick, M. D., Grand Rapids, Mich.

## Therapeutic Progress.

LEPROSY.—CHAULMOOGRA OIL AND HOANG NAN NI ITS TREATMENT.—No little interest has been excited by the investigations with regard to the prevalence of oriental leprosy in the United States, and reports show that this dread disease is no stranger among us. The St. Louis Republican comments on the annual report of the Louisiana Board of Health for 1880, in the following language:

This report brings to light the existence of a disease which we believed was not supposed to prevail anywhere in the United States except California, and there only among the Chinese, who bring it with them from their native country. Dr. Joseph Jones, president of the board, having investigated the subject of leprosy in the region of Bayou Lafourche, embodies the result of his observations in a report to the board. Undoubted cases of oriental leprosy were met with on both banks of the Bayou Lafourche below Harang's canal. Nothing short of an accurate census of the district can reveal the total number of cases, but Dr. Jones found 12 in the 10th ward of Lafourche. Sometimes all the members of a family, and at others only portions of the family are afflicted. Some of the sufferers were found in a deplorable condition—the face presenting a nodulated appearance, several of the joints of fingers and toes having fallen off, swollen and discolored ulcers on the limbs, and the hands being so entirely destitute of sensation that the unfortunate sufferers were able to handle coals of fire without pain. The people of the region regard the disease with horror and disgust, and the individuals and families afflicted with it are left to themselves, almost completely isolated from society. It is regarded as incurable, and no effort is made to cure or to arrest it. The unhappy patient is doomed, and left to the slow decay which consumes bone and flesh till the affection or some other disease ends his existence. The bones of the hands and feet first become thin and slender, then absolutely vanish by absorption, so that the finger nails may find themselves on the ends of the metacarpal bones through the disappearance of the intermediate parts. The inhabitants of the Lafourche region subsist largely upon fish, wild birds and animals, and rice, and this may have some influence in maintaining the disease; but it is the opinion of the investigating physician that it does not originate in Louisiana, but has been brought from the south of Europe by the ancestors of the present sufferers. This opinion is strengthened by the fact that nearly all the Lafourche lepers are Creoles, whose progenitors came from the Mediterranean region. The president of the state board, while he does not regard the disease as sufficient in extent to cause alarm, thinks it worthy the attention of the legislature, and advises that a leper-house be established where the victims can be confined and securely isolated.

In the New York Times we notice the death of the German who was treated for two years for leprosy at Charity Hospital. This patient, Charles Henkle, a German musician, was received at the hospital in 1878, afflicted with the disease. He died Dec. 1st, 1881, æt. 75 years. The Times reports the case as follows: Dr. W. L. Hamilton, who treated this case, said that Henkle had lived in New York since 1865, but previous to that date he had been in India, the West Indies and South America. He had lived in Texas and Mexico, where he engaged in the cattle trade, and in 1862 he had visited Cuba. Whether he contracted the disease in any one of these countries could not be authoritatively substantiated. It was only in 1874 that he noticed a macular eruption in his head, hands, and feet. The eruptions were reddish in color and of various sizes. The disease may have been latent in his system for a long time, and then the primary symptoms may have been so insignificant as not to attract his attention. But anyhow it was not until 1874 that the eruptions broke out. Under medical treatment the eruptions subsided, until, in 1876, they entirely disappeared. The man thought that he had had the disease eradicated from his system and discontinued taking medicine, but the consequence was that the eruptions reappeared. His eyebrows fell off, and then tubercular eruptions appeared, and these seemed to be fastened to thickened skin. In 1877 Henkle was suddenly affected with partial analgesia—loss of feeling—of the skin. In December, 1879, after his admittance into the hospital, the tubercles increased in size and numbers in the neck, chin, and eye-brows, giving him a leonine aspect. The tubercles were from one-tenth to one quarter of an inch in size. The following January tubercles and discolored patches appeared all over the body and extremities, and the patient suffered from stiffness of the joints, and the anæsthesia and analgesia increased, but diminished under treatment. Whenever the administering of the medicines was discontinued the symptoms and pain were greatly aggravated. The medicine that was given him was five minims of chaulmoogra oil internally once a day, and this drug was also used externally as an ointment. The doses were gradually increased in quantity and frequency until 20 minims three times a day was reached. In January, 1881, Henkle's condition was much improved. The tubercles had disappeared from the face, and the skin was less infiltrated, except over the supra-orbital ridge. The tubercles on the remainder of the body also diminished in size, but the stained patches remained.

The temperature of the extremities was normal. Six months ago the treatment was changed. Hoang nan powder, a Chinese remedy for leprosy, was administered to him in doses of two grains, morning and evening. Latter he was given a dose three times a day. His death, Dr. Hamilton thought, was caused rather by old age and feebleness than by leprosy, for the symptoms of that disease had to a great extent disappeared. The Doctor did not think that leprosy was contagious, for although Henkle was more than two years in the hospital, and another leprous patient had also been admited, no one in the building had contracted the disease. The surgeons who assisted in the care of Henkle were Drs. C. C. Jennings and Brace.

Mr. Succaram, of India, read a paper not long ago on "Notes of a Case of Leprosy with Remarks," before the Grant College Medical Society, India. The leprosy proper of the present day is, he said, known as Lepra leprosa, the same known to the Greeks as Elephantiasis Græcorum, and to the Aryans under the name of Maha Kushtha (meaning the great skin affection). The anæsthetic form of leprosy, conjoined with ulceration and interstitial absorption, was known to the ancient Hindoos as Galita Kushtha, while Mandal Kushtha was a generic term for several skin diseases, including the anæsthetic form of leprosy with eruption. The ordinary vernacular name for leprosy is Katha pita, a name more appropriately applied in Sanscrit medical works to a bad form of scorbutus bordering on beri-beri, attended with hemorrhage and ulcers. It was known to the Arabians as jojam (which literally means lion-faced, a feature somewhat characteristic of those who suffered from tubercular leprosy), and Khadar (a name applied to the anæsthetic form).

He then gave notes of a case which was under his observation for 7 years. William Shields, æt. 28, born of English parents, was admitted to the Incurable ward on the 7th of June, 1874.

*State on admission.* Numerous brown-colored spots of irregular shape and of various sizes, slightly raised above the skin, but not scaly, and sensitive to feel, were found all over his body. Skin of the face and ears distinctly tuberculated, and sensitive. Fingers were swollen and livid-looking, nails unaffected, except the right little finger, which had lost a phalanx at its end. The left big toe had also lost a phalanx; the nails of all the toes were horny, rough, and exfoliating. The soles of the feet were tender to touch, and its skin scaly in places. The sensibility of the skin covering the dorsum of both feet was impaired.

The skin covering the right knee-cap was anæsthetic, and marked by an old cicatrix; that of the left livid-looking and sensible to the touch. The skin of the elbow was discolored, anæsthetic, and covered with sores; no tenderness of either ulnar or median nerves. The eyebrows and moustache were shorn of hairs. He was considerably emaciated and weakened. His appetite was fair; sleep undisturbed. Tongue was florid looking; fauces tuberculated, and uvula excoriated and ulcerated in places. The left eye was vascular and painful; the pupil contracted, with opacity behind it. His temper was irritable.

*Onset and duration of the disease.* About five years before (1869), he first observed brown colored spots on his legs and trunk, unattended with any febrile disturbance. Up to date, he was not aware that he had insensibility in any part of his body, until his attention was drawn to it; the burn on the knee occurred about 15 months ago. In 1872 sores appeared on the toes, and about the end of 1873 the soles of his feet became tender. The soreness of the fauces first appeared in the cold months of 1872, was cured, and reappeared in 1873. The eye was affected in April, 1874.

*Previous history.* He was born in England, and left for Calcutta when he was 8 years old. At the age of 14 he took to sea, and served as a sailor for six years, and as a pilot for three years more. At this time he first observed the brown spots on the body. He had suffered from syphilis and gonorrhœa two years before the disease made its appearance—no buboes or any skin eruption had followed the complaint. He was treated with mercury, but was not salivated. For the present complaint he was treated at Simla with mercurials, without any benefit; on the contrary, he grew worse.

*Family history.* Parents were both European, and there was no history of the disease in the family of either.

*Treatment.* The eye demanding immediate treatment was attended to first. He was then put on gurjun oil treatment on the 9th September 1874. It was observed to increase the action of the bowels and the kidneys. At the end of two months the medicine had ceased to act on the bowels, the heaviness in the feet was almost gone, the fingers were more pliant and their swelling had subsided, the patches were less discolored, and those on the back had recovered their sensibility and the lividity of the face was lessened. The ulcers were, however, not in the least affected, as they continue to keep on their course. This treatment was continued to the end of February, 1875. In the middle of December, 1875, he was put on chaulmoogra oil treatment, which was continued up to the beginning of 1877; during this period, the affection of the eye and the ulcers on the feet, had their remissions and exacerbations. On the 3rd of March 1876, eruptions of a tubercular character, accompanied with fever, broke forth on several parts of his body; this was followed by sore throat, bronchitis, and conjunctivitis. On the 12th of August, accuminated tubercles of a painful character and purplish in color appeared on both thighs. The next day, he had fever and the eruption became less painful. On the 20th of November, the discoloration had disappeared, the skin became smooth and soft, and his general health improved. Anæsthesia and sores on the feet, however, persisted. Between this date and the first of October, 1881, when he was discharged, he had occasional breaking out of the ulcers, and a severe attack of bilious remittent fever with angio-leucitis in the left leg, which lasted for a week. At his discharge, all external evidences of the disease had disappeared, except a faint wrinkled appearance of the face; the anæsthesia in the extremities from the elbows and the knees downwards, had however, remained; an ulcer on the left foot was open and somewhat painful. Power of writing not impaired though his fingers were benumbed. Virile powers had impaired considerably during the vigor of the disease; but were regained, when the severity of the symptoms had subsided.

*Remarks: Prevalence of the disease.* The wide spread of the disease, Mr. Succaram remarked, was not recognized to its full extent, either by the people or the profession. Besides the large number of lepers who had become paupers and taken to begging and might be seen in our streets, and those who crowded in the different places of pilgrimage in India, and a few who followed some trade, a great number might be seen in the upper classes of people; and there was scarcely a community in Bombay which was free of the victims of this dire disease (Mr. Succaram had seen nearly 60 cases in the upper classes since 1873); and an opinion was gaining ground among the people of India, that since the advent of British Raj, the disease had, on account of its contagious nature being either ignored or looked upon with indifference, spread wide and far.

*Contagious character of the disease.* From earliest times, the disease has been looked upon by the people in all countries to be contagious in character. But the profession were divided in opinion, some doubting whether the disease was at all con-

tagious. Since the researches of Dr. Hansen of Sweden, and of Dr. H. V. Carter on our side, much light has been thrown on the nature of the disease, as both have, independently of each other, discovered in the diseased nerves and tubercles, certain bodies of a pale yellow color, with granular contents, nuclei, and vacuoles, resembling certain vegetable organisms existing in different isomorphic forms and having in them alternation of generation. These bodies of Hansen, as they are styled, might, Mr. Succaram thought, be the isomeric form of some microscopic organism, perhaps already known to us. The fact of the anæsthetic form of the disease affecting the superficial nerves and ceasing at the point where the nerves dip into deeper parts, was, Mr. Succaram thought, very suggestive in the pathology of this disease.

*Hereditary transmission.* This has been looked upon as the most frequent cause of the disease. But according to Dr. Carter, only 20 per cent. of those affected, could trace their disease to this cause; and in the Hospital for the Incurables, only 10 per cent. of those admitted, could trace it to the same cause. In fact, Mr. Succaram was of opinion, that heredity, as a cause of the disease, stood in the danger of lapsing into contagion and inoculation; for, it was difficult to exclude, in cases where children suffered with their parents from the disease, contagion or inoculation from constant contact. In the 60 cases which were observed by Mr. Succaram among the better class of people, only one could be traced to heredity, the grandmother being a leper. But it should be remarked that this lady had five children borne to her, before she had any sign of the disease on her. The first four children were not affected with the disease; but the last one, who was young and often in contact with her when she had the disease on, as well as all the children of the eldest boy, who were likewise constantly in her company, were affected with the disease. Cases like these strongly militate against the heredity of leprosy, and the ill-defined and imperfectly understood law of Atavism stands on a very shaky basis. In the offspring of leprous parents observed at the Leper Asylum in Bombay, the disease had appeared in some at the early age of 12 months to 3 years; while, in others, it had not made its appearance even at the age of 5 or 6 years. In those cases where the disease had a spontaneous origin, its appearance in infancy was extremely rare; while in children of leprous parents, or these living with leprous relatives, its early appearance was very common.

*Duration.* It was believed that the disease died a natural death after the lapse of about 20 years, and should the system survive the weakening effects and the secondary complications, the patient will be left without any sign except those due to damage done to the extremities owing to nerve changes. Mr. Succaram had met with two cases of Europeans, in whom the disease had in one case appeared 20 and in the other 38 years ago. In both the active symptoms had ceased; there was no fresh attack of fever or eruption; the skin was clear, soft, and supple. The stumps of the fingers and the toes were, however, liable to break into sores on the slightest injury.

*Severity of the symptoms.* People were met with in whom the countenance had the leonine character, shrunken, disfigured, repulsive, with depressed nose and shorn eyelids, eyebrows, and moustache; voice husky; tongue red, fissured, with large tubercles at the base, and tubercles and ulcers on the fauces; often helpless and quite crippled; the hands, fingers, feet, and toes turned to mere stumps, or distorted in various ways, swollen, and covered with open and discharging or indolent, deeply excavated sores; the hands of the joints covered with ulcers; skin rough, fissured, and cracked; nails rough, of dirty brown color, and exfoliating; pricking and gnawing pains all over the body; skin eruptions, such as eczema, impetigo, icthyosis, and the itching varieties of lichen, prurigo, and herpes; ever liable to attacks of fever, fresh eruptions, acute neuritis, angio-leucitis, erysipelas, conjunctivitis, painful choroiditis, bronchitis, and dysentery; the last often closing the painful drama. The state of the mind and the special senses varied; some were dull, despondent, stupid, with a stoldid indifference of men and things; others were suspicious, irritable, and quarrelsome, with blunted sense of taste and hearing, and sight impaired, or entirely lost.

*Virile powers.* The loss of the virile powers was observed in the case described above, and it was noticed also by the other six Europeans who were treated in the hospital at the same time. The improvement in all, with the lessening of the severity of the disease, was not, however, uniform. This was an important observation, as it had a bearing on the matrimonial capabilities of leper, and Manu's laws affecting their claims on inheritance.

*Treatment.* Arsenic, mercury, and iodide of potassium have been found deleterious. Baochee and gurgun, kowtee and chaulmoogra oils have their advocates, the writer being more inclined in favor of the last drug. Mr. Succaram gave it in 10 drop doses twice a day, with an ounce of milk, taken on a full stomach. One of the patients, on whom the oil produced nausea and purging, took it in a sweemeat prepared at the confectioners', and known as dudh-penda, without perceiving these effects. Yet, no medicine has been known to cure leprosy, and the only safeguard left to us against the inroad of the disease, knowing it to be caused by some germ or vegetable organism finding its way from without, was segregation of all proliferous and moving centres of contagion, the victims of this disease.

*Leper Asylum.* No special provision was yet made in our city, except a *dhurmasala*, situate in Belasis road, erected long ago by the District Benevolent Society. This institution was supported by yearly contribution from the charitably disposed people of Bombay. Mr. Succaram has visited the place and he found it to be in a most miserable condition. In 1875, he visited it often and found ranges of rooms, in which were located about 125 male and female adult lepers (exclusive of children); human beings affected with a painful and exhausting disease were huddled in small rooms (more like kennels for dogs than habitations for men), provided with cooking places on the outside, under the eaves, on a raised mound of earth, a perfectly miserable accommodation during the rainy season. There were seen married couples loitering with their children, some affected with and others free from the disease. A case was related of a child born with leprous eruption and dying soon after birth. A picture had been already drawn of the miserable people who reside there, under the heading "severity of the symptom."

Mr. Succaram concluded by appealing to all medical men, as ministers of health, to exert either by words, deeds, influence, in getting up for such helpless and miserable beings, spurned by society and forsaken by friends and relatives, objects of true pity and charity, but possessing in their person dangerous elements of infection, an asylum worthy the name of Bombay.

Some discussion followed:—

The President, Mr. Atmaram, and others said that the hereditary character of the malady was proved beyond doubt, as it had often been traced to the third generation. They did not, however, deny that the disease also partook the character of a contagion. The Secretary said that unless the authorities adopted remedial measures such as were resorted to in Europe, the disease would not be easily stamped out from the country. He feared, however, that the authorities would not take the

initiative unless a man in the position of a Governor or a Lord Bishop became a victim to the disease.

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COLOR BLINDNESS.—The following resolutions, adopted by the International Medical Congress, London, 1881, as to "Tests of Sight suitable to be enforced in the case of Signallers and Look-out Men, and other persons by Land or Sea, with suggestions as to International arrangements for a uniform system of Maritime, Coast and Harbor signalling, with a view to the safety of life and property," were followed by explanatory remarks under the several articles.

*A.—With respect to land.* (1) That the recommendations of the last International Medical Congress, held at Amsterdam in 1879, are accepted by the present Congress as forming the most suitable basis upon which every government may frame its own regulations as to its railway service. They are contained chiefly in Article. XII. of the "Projet d'un réglement pour l'examen des facultés visuelles du personnel des chemins de fer," laid before and accepted by the Ophthalmological Section of the Amsterdam Congress, which is nearly as follows:

"For admission as driver or stoker, is required a healthy condition as regards habitual congestion or irritation of the eyes and eyelids; for each eye, complete field of vision; normal acuity and refraction; color sense at least four-fifths of the normal; total absence of commencing cataract, or any other progressive disease.

"For admission to other railway service, is required a healthy condition as regards habitual congestion or irritation of the eyes and eyelids; for each eye, complete field of vision, total absence of cataract, or any other progressive disease; for one of the eyes, normal acuity and refraction, color sense at least three-fifths of the normal; for the other eye, sight of at least half the normal, as regards both acuity and color sense."

*B.—With respect to sea.* (2) That in ocean-going ships and in all steamers, especially those carrying passengers, there should always be in actual control of the helm a person possessing with the two eyes together, without glasses, normal sight, both as to acuity and colors; and that, in addition, in such ships, at least one of the persons actually on the look-out should be similarly qualified.

(3) That, in vessels engaged in the coasting trade, every person liable to take charge of the helm should possess with the two eyes together, without glasses, sight equal to at least two-thirds of the normal, both as to acuity and colors.

(4) That all persons engaged in marine signalling, ashore or afloat, and all pilots, should have normal sight, both as to acuity and colors, as de fined in Article 2.

(5) That hypermetropic persons, although satisfying the requirements of Articles 2, 3, and 4, should, nevertheless, not be admitted, if before the age of eighteen they have a manifest hypermetropia of one dioptre.

(6) That re-examinations should be made at the age of forty-five.

(7) That the examinations should be conducted by persons of recognized competency, under the direction of a Central Medical Authority in each country.

(8) That an international commission should be constituted, to fix upon such further measures as to signals as may be necessary for safe navigation, and, especially, upon the standard colors, and the sizes of the signals employed.

EXPLANATORY REMARKS.

(THE NUMBERS REFER TO THE RESOLUTIONS.)

*A.—As to land.* (1) The signal services on land, though quite as important, are not so purely an international matter as those having reference to the sea. Many countries have already established legislation in this respect, and others are introducing it by degrees. It is believed that the standards now recommended may be of general utility, especially in the case of conterminous countries. The mode of examination, for colors especially, is here, as at sea, of the highest possible importance.

*B.—As to Sea.* It is obvious that regulations having an international character become every year more urgently required, from the increasing number, size, and speed of vessels.

In view of the practical difficulties with which all compulsory examinations are attended, it has been sought,—

(*a*) To limit the examination in each case to what is strictly necessary.

(*b*) To require them only when absolutely indispensable, and of the smallest possible number of persons.

(*c*) To simplify the methods as much as possible.

On large ships, many sailors not required for the helm, or to be responsible for the look-out, may be admitted without certificate of examination; but as it will be in the interest of all to be possessed of such a certificate, which would represent a higher competency, it may be expected that many would themselves seek for it, from whom it would not necessarily be demanded; and facilities for obtaining it should at all times be at hand in maritime ports.

(2) Good sight without the aid of glasses is required, because glasses fail to help just where clear sight is most needed, e. g., in storm, rain, or fog.

*Acuity of Sight.* Complete acuity is not more than sufficient, and even scarcely sufficient, having regard to the increasing number, size, and speed of steamers. But it will be practically enough if at sea this complete acuity is attained by the use of both eyes combined. The number of persons excluded under this rule will be much less than if complete acuity for each eye separately is exacted.

The acuity is supposed to be determined by viewing letters or signs at a certain distance, under a certain angle, on the principle of the test-types of Snellen.

Color sense is supposed to be tested by pseudo-iso-chromatic tables, on the principle of those of Stilling, subject to control by the use of light transmitted through colored glass, in imitation of signal lights. This control will also aid in detecting central scotoma for colors, in the very rare cases where it might co-exist with the required acuity.

Holmgren's excellent tests have been already extensively adopted. But their use demands more skill in the examiner. Tests well selected on the principle of Stilling might be very well adopted as standards for ascertaining normal color sense, as well as definite degrees of color sense below the normal. The principle of Stilling has been recommended as affording a quantitative as well as a rapid qualitative test.

(3) A lower standard is fixed in the coasting trade (excluding steamers), because the vessels are smaller and the speed less. Moreover, a demand for full acuity would render it difficult to procure a sufficient number of sailors; as each hand must be liable in small vessels to serve at the helm.

(4) It is obvious that the persons here named must have full acuity and color sense.

(5) Persons having a manifest hypermetropia above that here indicated would not possess at the age of thirty-five or forty, without glasses, the needful degree of acuity; it is better, then, both for themselves and the service, that they should not be admitted at all.

(6) The attendant practical difficulties have caused one re-examination only to be advised at the age of forty-five. It has been found that the very great majority of persons, once admitted as having good sight, have retained it up to that age. A

great number, no doubt have been admitted hitherto without sufficient examination. Still, it would not be practicable to institute a general examination of those already in the service. Nevertheless, it would be desirable to examine anew, in the case of passenger steamers, all those responsible as helmsmen and look-out men.

The Congress recommends that surgeons of ships should be qualified to exercise special surveillance as to the sight of those employed in these capacities on board.

(7) A centralt medical authority is requisite to insure the perfec ion of the system and its uniformity. He should propose the examiners, and be responsible for their fitness. They should be men of ascertained competency, and, as far as practicable, qualified as medical specialists.

(8) The measures recommended in Articles 2 to 7, should be brought into operation without delay. But an international commission would still have to determine the precise color of the glass, securing uniformity in that as well as in the size and disposition of the signal lights.

The Congress lay the greatest stress upon the appointment of this commission in respect of marine signalling, as quite indispensable for the attainment of the object in view. The commission would have to inquire into, and decide upon, many matters on which information is at present incomplete, and regarding which only a few points have been touched upon in Article 8.

Every government, especially the maritime governments, should be requested to place one or more members on the commission, and chiefly experienced naval officers and medical specialists.

It is understood that this question of an international commission is about to be submitted to the Legislature of the United States of America, supported by a petition largely signed by scientific men of that country.

The resolution emanated from the Ophthalmological Section of the Congress, and were drawn up, in the first place, by a committee representing twelve different countries.

Report No 445 of the 47th Congress, first session, House of Representatives: The committee on naval affairs, to whom was referred joint resolution No. 24, relating to color-blindness and visual acuteness in persons employed in the navy and merchant marine, have considered the subject, and submit the following report:—At the last session of Congress this subject was brought to the attention of the House by petitions signed by numerous highly distinguished scientific men of the country. The committee on naval affairs of that House gave the subject careful attention, and made a report, which we quote as the best presentation of our views which we are able to make. That report is No. 1569, Forty-sixth Congress, second session.

Dr. B. Joy Jeffries of Boston, who has devoted much time in the study of this very important subject, and who has voluntarily, and at his own expense, done much to awaken interest in it in several of the States, and who by his disinterested efforts has induced many of the great railroad companies to adopt his system of examination and test for their employès, was invited to come before the committee and give his views upon the subject. He accepted the invitation, and on the twenty-third day of January last he appeared before the committee and illustrated the various methods which have been adopted in this country and in Europe for the detection of color-blindness, and the tests made use of to determine visual power and acuteness, and explained the importance of establishing by an international congress a universal system of examination and tests for these visual defects, and a standard of colors for signals at sea, to be used by maritime nations. An abstract of the remarks of Dr. Jeffries is hereto annexed as an appendix to this report.

The committee think the subject is of so great importance as to demand the attention of all maritime countries, and they believe that the action recommended by this committee will, if adopted by Congress, meet with ready response from the other nations, and that a system may result from it which will prove of vast benefit to the human race.

They recommend the adoption of the accompanying joint resolution as a substitute for that referred to the committee:—

A joint resolution was adopted by the House of Representatives, relating to color-blindness and visual acuteness in persons employed in the navy and merchant marine.

*Whereas*, it is important that definite and uniform standards of examination for color-bindness and tests for visual acuteness in persons employed in the navy and merchant marine should be established which shall be in harmony with such standards and tests as are or may be established by other nations: Therefore,

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That the President is hereby authorized and directed to appoint, by and with the advice and consent of the Senate, some suitable person qualified for such service, who, with one line officer of the navy and one medical officer of the navy, to be detailed or designated by the Secretary of the Navy, shall attend and represent the United States in any international congress or convention held by authority of law in any European nation to consider and act on said subject; and the sum of ten thousand dollars is hereby appropriated, out of any money in the Treasury not otherwise appropriated, to be used and expended, or so much thereof as may be needed, under the direction of the President, to compensate the person so appointed and defray the necessary expenses of the person so appointed and of the officers of the Navy so detailed or designated. And the person so appointed and the officers of the Navy so detailed or designated under the provisions of such act shall join in a report of the proceedings of such congress or convention, and of the conclusions reached thereby, if any, to the President, to be by him laid before Congress, to the end that an international system of examinations for color-blindness and tests for visual acuteness, and standards for colors for signals used at sea, may be established by law.—*Official Circular.*

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Clinical Experience in the Use of the Solution of Oxy-Sulphuret of Calcium.—Dr. C. Heitzman, of New York, read a paper at the meeting of the American Dermatological Association, at Newport Sept. 1, 1881, on the use of this solution in the treatment of diseases of the skin. He says of the solution:

The solution of oxy-sulphuret of calcium is a preparation long known in dermatology. It first became extensively used after the recommendation of Dr. Vleminckx, of Belgium, and in honor of this physician, who found the solution to be the most efficacious remedy in scabies, it bears the name of the solution of Vleminckx. Besides in Vienna it had been largely used by Hebra for removing the patches of psoriasis.

In bringing the results of my own trials in different skin diseases before the profession, it is perhaps not superfluous to remark that a specific remedy does not exist; neither is there anything like an invariably sure and safe action of a remedy. We know too well, that even powerful remedies often fail in their action or produce an effect contrary to that we had expected upon the ground of a large experience. It is a depressing fact indeed that in the treatment of diseases of the skin, where everything is open to direct and accurate observation, the remedies do not work uniformly, and it not very infrequently happens to the der-

matologist that where he expected an improvement from the application of a certain remedy, just the reverse takes place, and a decided deterioration of the condition of the skin is the result of his therapeutical measures. Every physician, who treats the very best class of patients, the most educated and refined people, knows what the impression made upon the patient is under these circumstances. The sorrowful looks of the sufferer are scarcely worse than our own conviction of our therapeutical impotence.

I wish to emphasize, therefore, that a recommendation of a certain remedy can hold good for an average of cases only, and every one who repeats the trials must be prepared for failures. The dermatologist, especially, who observes such failures and becomes convinced that even external medication is by no means an invariably safe and successful precedure, cannot have much faith in internal medication, which is nearly completely beyond control. None of us will shrink from administering remedies inwardly, whenever he deems it useful to the patient, but success in many instances is uncertain with such treatment, much more so than with local medication. The claim of some dermatologists that they can control skin diseases by internal remedies, and exert a therapeutical action upon the stomach, the liver, the kidneys, etc., of the patient, the deran gements of which are imagined to be the cause of skin diseases, in my conviction lacks a solid foundation. A number of reliable physicians have demonstrated how futile such claims are, and they have done so, not on the ground of mere theoretical speculation, but on the ground of direct trials of unprejudiced observation.

Those dermatologists who administer a great variety of drugs internally, no doubt, honestly believe that they do good to their patients, and very likely the patient believes it himself. But the Indian medicine-man also believes that his herbs and decoctions do good, simply because the patient gets well under their use. A strict and scientific proof of such remedial actions, however, is wanting with both the Indian and the white medicine-man, as neither of them knows what he does, or whether his remedy does not do more harm than good.

The solution of oxy-sulphuret of calcium is prepared in the following way: Take 1 part of calx viva, 2 parts of precipitated sulphur, 20 parts of water; boil in a china or glass vessel to the remnant of 12 parts, and filter. The dark red-brown liquid has a very disagreeable smell, and is a strong caustic. The smell, perhaps the only objection applicable to the remedy, may be overcome to some extent by the addition of fragrant oils, especially that of anise. The solution may be diluted with water according to necessity; also with alcohol, which does not materially alter the properties of the solution, although a part of the sulphur lime is precipitated by it.

The solution of Vleminckx I have applied in the following diseases:

1. Psoriasis, 30 cases. As a matter of course, psoriasis of the scalp and acute psoriasis were excluded; the former as the solution destroys the structure of the hairs, to some extent at least; the latter, as any local irritation must be avoided in cases where the eruption of psoriasis takes place in an acute way. According to the age of the patient and the tenderness of the skin, the solution was applied pure or diluted. It was rubbed into the patches with a course flannel rag or a toothbrush at night, until slight stinging had resulted. Caution must be taken not to rub too hard, especially if the pure solution be applied, as eczema may be produced, treatment of which takes more time than the removal of the psoriasis patches. After the application of the solution, in mild cases the tar ointment, in severe cases the tar tincture, is rubbed into the patches, the patient wearing an old flannel dress during the time of the treatment. Baths after the application of the solution can be entirely dispensed with. In five or six weeks even very severe cases of psoriasis, where the whole body is covered with large patches, got well. No remedy was given inwardly, but meat diet was reduced or entirely cut off; also spirituous drinks of every description. Uufortunately we have no means yet to radically cure psoriasis. The very first thing that we must tell to the patient is this.

More recent remedies, especially the chrysophanic and pyrogallic acids, I have also tried in a number of cases; but like any other remedy, by long continued use they lose their efficacy; pyrogallic acid, moreover, is by no means entirely harmless. It is certainly of importance to have at our disposal a number of powerful remedies in order to allow a change in the treatment, whenever required, and from this point of view the treatment with solution of Vleminckx and tar, though old-fashioned, remains recommendable.

2. Acne disseminata, 95 cases, out of which 75 were cured. In 12 cases the result was unknown, as the patients did not return; in 5 cases the solution proved to be useless, and in 3 cases the disease was aggravated by its use. The solution may be given pure or diluted with alcohol, and in the former case the patient at first dilutes it with 5 parts, in the latter case with 4 or 3 parts of water. The dilute solution at night is rubbed into the face with a coarse flannel rag and left on the face over night; next morning the face is washed with water and soap. If the patient commences with 1 tablespoonful of the solution and 5 tablespoonsfull of water, after 3 or 4 days he will take 1 to 4½ water, after 3 or 4 days more, 1 to 4 water, and so on diluting with ½ tablespoonful of water less, therefore increasing the strength of the remedy until it is used pure without evil effects. Should the solution be taken too strong from the beginning, dermatitis will be the result; while after the lapse of a certain period of time, varying with different patients, the pure solution is borne perfectly well; only a slight desquamation is noticeable in the morning, which can be easily concealed by a little cold cream. Where there is a great deal of seborrhœa of the face combined with the acne, I found it advantageous to have the face first washed with water and soap and afterwards the lotion applied. A slight stinging sensation will follow the application, and its appearance is the signal to stop the rubbing. As a matter of course, first all pustules and comedones must be emptied by squeezing or by incisions, before the solution comes into use.

Several weeks are required in severe cases, in making inunctions of strong lather of castile soap or solutions of green soap, etc., before the skin is rid of fleshworms, and only then should the solution of Vleminckx be given. Also during the treatment with this solution the emptying of comedones must be continued, nay, after an accomplished cure this emptying is the only safe method to avoid recurrences.

According to the severity of the case, and the conscientiousness with which the patient attends to the squeezing out of the pustules and the comedones, several weeks or several months are required to obtain a cure, though on an average six weeks proved to be sufficient for this purpose. In most instances this treatment gives no guarantee against relapse, but if we tell our patients to keep up squeezing and resume the lotion as soon as a trace of the disease should show itself, the results are very satisfactory.

We have but a few good remedies for the treatment of acne, and amongst these doubtless ranks the solution of Vleminckx.*

*In March, 1880, Dr. Le Grand N. Denslow drew my attention to the usefulness of internal administration of ergot (fluid extract one-half drachm doses twice or three times daily), and I can fully corroborate the assertion of this gentleman as regards its speedy assistance in the cure of pustular acne.

There is a small percentage of cases in which the solution of Vleminckx did not answer at all, as new pustules appeared even during its application, and a still smaller percentage where the solution decidedly aggravated the disease. To what this is due I am unable to tell, but my impression is that there are patients who cannot bear any irritation of the skin without reacting with inflammation or suppuration. In such cases we must resort to a soothing treatment exclusively.

I consider the treatment of acne disseminata a successful one in a great majority of cases, and the advantage of the solution of Vleminckx is to gradually remove all pigment spots from the face and render the skin smooth and clean.

3. Eczema chronicum, 14 cases, in which the solution was tried. This limited number is due to the fact that the short action of a caustic lotion does not prove so useful in the treatment of chronic eczema, as does the continuous application of irritating ointments and of the tar tincture. We know how stubborn a chronic infiltration of the skin, caused by eczema, is, and amongst the remedies for locally and cautiously irritating in order to produce a new inflammation and a gradual absorption of the products of the chronic inflammation, the solution of Vleminckx deserves mention. Hot sulphur baths have a well-established reputation in the treatment of chronic eczema, and patients who cannot visit a watering-place may just as well pour the solution into the bath in order to obtain at least temporary relief. Nobody, I think, will promise a radical and permanent cure of chronic eczema, as nobody knows what the cause of the periodical recurrences is.

I have notes of 4 cases of chronic eczema of the scrotum, accompanied by severe itching, in which the solution, begun very dilute and gradually increased in strength, resulted in a cure of the disease. I know of only 2 cases in which the cure was a permanent one, extending over several years. In 2 other cases of eczema of the scrotum the solution seems to have done no good whatever.

4. Pigment anomalies, such as lentigo, chloasma and vitiligo, I have treated with the solution in 9 cases, always foretelling the patient that the beneficial effect, the paling of the pigment spots, would be only a transient one. As the solution, if properly diluted, is entirely without unpleasant consequences, it may be applied, when the patient insists upon obtaining at least a temporary relief.

5. Rosacea, 36 cases, embracing acne rosacea, and the erythematous and hypertrophied forms. Of the latter form, no severe case had come so far under my observation. A cure was obtained by the application of the solution in 29 cases, and improvement in 7 cases. Amongst the cured cases a number have shown brilliant results, speedy and complete, to such a degree that I consider the solution as one of the best means if not the most powerful remedy in the treatment of rosacea. The plan adopted was identical with that laid down in the remarks upon acne disseminata, viz., the patient begins the lotions, preferably at night, very dilute (1 to 5 water) and gradually increasing the strength of the solution by reducing the amount of water added. If acne pustules be present, or the sebaceous glands dilated, their emptying every night before the lotion be applied, is a very important feature, and this method alone is sufficient to make the dilated blood-vessels contract and the newly-formed ones disappear. Bad cases in ladies' faces, extending far over the cheeks, have completely yielded within a relatively small number of weeks. The hypertrophied form, if present in a mild degree, can also be reduced and in turn the nose obtains its normal size and color. No internal medication is required to obtain these possible results.*

6. Tinea tonsurans. Only a limited number of cases, in which the solution apparently had no marked effects.

Tinea versicolor, 11 cases, all cured within a few days by the application of solution of Vleminckx, diluted one-half with water. The solution is certainly preferable to the sulphurous acid, whose offensive vapors are rather repulsive. I do not know of any remedy, and I have tried pretty nearly all recommended, which would render the skin normal in such a short time, as our solution does.

8. Scabies, 6 cases only, all cured: A Prussian savant traveling in South America, acquired the disease in the bed of the captain of a ship; the daughter of a physician on a trip through Ireland got scabies in the bed of a hotel; a waiter on a trip from Newport to New York became scabious in a berth of a steamer, and gave the disease to two of his brothers, all sleeping alternately in one bed; the origin in the sixth case was not traceable. The rubbing in of the lotion, diluted one-half with water, all over the body, with special care to the places known to be the favorite seat of the mite, produced a cure in three to four days, without interruption of business. In one case a very extensive eczema was present on both feet, and I applied—against the teaching of experienced scabies-curers—the solution, though in a very dilute state. The eczema was cured in a short time.—*Maryland Med. Jour.*, Dec., 1881.

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Treatment of Gonorrhoea.—Wm. R. D. Blackwood, M. D., physician to St. Mary's hospital, Philadelphia, in the Medical Bulletin sums up the various forms of treatment for this disease, and adds thereto some of the results of his own experience. His article, though said to be written for the benefit of the younger readers of the Bulletin, is of interest to the general practitioner, and contains a number of valuable suggestions:

Gonorrhœa is a very old acquaintanc of the medical man, and one which "sticketh closer than a brother (or sister)" to ordinary mortals. It is exceedingly apt to come on the scene at the most inopportune moment, and to stay a most unhappy visitor, and one that has long outlived his (or her) welcome. There is but one instance on record where the acquaintance was voluntarily sought, and growing tiresome in a short time only, vigorous efforts, it is said, were made to dissolve partnership, which, it is gratifying to know, were crowned at last (after a heavy siege) with success. All other instances, it is safe to assume, have come unsought, or at least unexpectedly, and the desire to "speed the parting guest," if not actually frantic is certainly sincere. It is hardly worth while to go into statistics at this time to show how prevalent gonorrhœa is, but it suffices to say that there is too much of it in Philadelphia at least (and this is doubtless true of other localities), and he who can easily and expeditiously oust the intruder can have about as much to do in this line as will fill his office hours up comfortably. Considering the fact that the disease under consideration is a simple disorder, not liable to, or usually accompanied with, grave complications, and furthermore, that those which do accompany it are generally avoidable under simple precautions, it is singular that s much diversity of opinion prevails as to the best method of medication and the most suitable remedies to be employed. With some physicians local remedies are unknown, although the malady is local in the outset, and

*Ergot, as recommended internally by Dr. Le Grand N. Denslow, also in several rosacea cases, seems to have acted in a beneficial way, though good results seem to follow its use more in cases of acne disseminata than in rosacea.

usually does not get beyond reach of these agents. With others the action of constitutional drugs in modifying inflammatory action in any organ or part of the body is ignored, and more or less decided, direct effect only is sought habitually. Neither plan will work well at all times, and in the majority of cases a combined treatment will serve better than either single method. The *ardor urinæ*, for instance, is at times very distressing, and here a mild alkaline salt, with possibly a bland diluent or diuretic comes into play admirably. Again, the bowstring shortening of the urethra in antagonizing the erectile force (which does not, as a good neighbor, keep quiet) complicates matters seriously; yet, how readily this is kept in bounds by an appropriate bromide draught with henbane, lupulin, or camphor *hora decubitus;* or, if chosen, the suppository as attacking the "seat of war" more nearly, will insure "rest for the weary," secure a good night's sleep, and in those of a hasty disposition, in whom "patience is not a virtue," prevent such rash and disastrous manœuvres to "break the back of the enemy" at any cost, which once in a while supervene on what may be termed *penile opisthotonos*. On the other hand, how many can to their sorrow trace back a wretched dyspepsia to the heroic mixtures of balsamic (but not by any means fragrant) drugs with accompanying terebinthinate and piperaceous adjuvants, and how disgustingly nauseous were the messes in vogue in our grandfathers' days, before elegant pharmacy was born.

It has been my bad fortune in extended army experience (for then gonorrhœa paid nothing extra) and my good fortune in civil practice (for now the disease is classed under a special head) to see a goodly share of the malady under consideration, and my experience has been from the past to treat it on a general principle, making each case a study in itself should simple means not readily control it. I may say at starting that the rapid cures we hear about—in three to five days, for instance—have not come under my observation, either in personal practice or that of any medical friends with whom my association was intimate enough to enable me to see their results. In the hands of ordinarily intelligent and capable gentlemen the cure is accomplished in the majority of persons in from three to five weeks, and where proper care is not secured not a few will drag on to the same number of months before permanent relief is had. By this I do not mean that the gonorrhœa runs into gleet, but that a free discharge of virulent pus is maintained during the whole period named. In the attempt to secure a rapid cure by the abortive treatment, or substitution of a simple inflammation (innocuous) for a specific (contagious) one, more harm has been done than good accomplished, at least that is the opinion of the writer, and many cases have come into his hands where such an attempt has been made, usually by quacks, but sometimes by reputable practitioners, the result of which has been to establish high inflammatory action, with accompanying phymosis or paraphymosis, intense dysuria, chordee, epididymitis and cystitis, sometimes one of these complications, and frequently several of them—the gonorrhœa not being overpowered at all, but necessitating active treatment after the results of the "abortive" plan had been overcome. Personally, I have never screwed up enough courage or indifference to try this ultra-heroic procedure. Diametrically opposed to this method is the childlike confidence that nature assisted by cleanliness, which may go so far as urethral washing out with tepid water, will suffice, and there are practitioners who really believe in this curative line of practice. I have tried it, but never with success. The first week always presented clear indications of deeper progress toward the prostate, and I could not risk placebos beyond that time.

Now, what should we do, supposing a young and healthy man applies for relief? To begin with, there is, in almost every instance, some febrile excitement, and although to a superficial observer this may not be apparent, or be so slight as to lead him to disregard it, attention to the point is of more value than might be supposed. A very little general fever lights up reflex discomforts in certain nervous constitutions, and as we do not know just how our patient may stand anything of the kind, it is well to administer a moderate saline purge, to which a little sodium bicarbonate is added. Along with this is a drachm or two of liq. ammon. acetat., with one or two minims of aconite or veratrum tincture every second or third hour, as indicated, will fit in nicely the first day, and locally, half an ounce of aqua camph. may be injected. If the discharge is moderate, this wash may be used three or four times daily, and if the secretion be profuse, ten or twelve injections may be employed. In twenty-four to thirty-six hours an addition is usually indicated to the injection, which may take several forms, the principal indications being, first, a calmative; second, an astringent; and third, an antiseptic action. A long list of salts has been used to attain these ends with varied success; each being a favorite with some, and the same utterly useless to other practitioners. Why this is the case is hard to explain, unless, as has been already stated, that no one plan or remedy will act properly in every case, owing to the severity of attack, duration of illness before inaugurating treatment, and idiosyncrasy of patient. To quiet the general and local irritation, the anodyne may be employed by the stomach, by urethral injection, or the two may be combined. My own habit is to keep acidity of the urine in check, and at the same time encourage a free renal secretion of diluents and diuretics, with mild alkalies. Two purposes are thus served: the increased urinary flow keeps the inflamed canal well washed out, and in the proper direction, from behind forward, and this point is of very great importance, for the tendency of the pus to find its way back to the bladder is assisted by partial closure of the meatus through inflammatory thickening; and the frequent urination not only removes the discharge more frequently than would otherwise occur, but it also decidedly lessens its acrid character. In addition to this, I habitually order with the astringent injection, as a component part, an anodyne, such as tr. opii deodorat, or tr. hyoscyamus. Chloral or sodium salicylate at times acts well, and in severe cases a portion of the infusion of anthemis is admirable. Aqua camphora forms a convenient and serviceable vehicle for whatever salt is selected, and a combination of zinci sulphocarbolas, tr. opii sedativus with aqua camph. will, in a large majority of cases, succeed promptly in mitigating and shortening the attack. Besides the use of a single salt of zinc, lead, copper, or silver, all of which are serviceable in appropriate cases, a combination producing precipitation by decomposition, such as a mixture of zinci sulphas and plumbi acetas, or the employment of an insoluble material, as, for instance, the subcarbonate or trisnitrate of bismuth suspended in water is frequently prescribed, the object being to coat the mucous membrane with a bland, unirritating deposit as a protection, not only at the already inflamed portion, but over the yet healthy tract, and thus render extension less possible. Theoretically, the method is good; practically, it generally fails. A serious objection is that the sticky mass thus formed blocks up the urethra so much at times as to restrict free urination, and as the inflammatory action may spread by simple extension without the necessity of actual contact with pus once it begins, the prophylactic object is not thus attained. It is preferable, therefore, that perfectly soluble salts be selected, and it is also desirable that the strength

of the solution be moderate; if pain is produced, unless it be slight and momentary, dilution is necessary; and many a doctor has been blamed unjustly for subsequent stricture because the injection hurt for a few minutes, when, in reality, the complication arose from otherwise explainable causes. Whatever be the injection ordered, it should be frequently used, and if the patient cannot cleanse the canal by urination just before injecting, he is directed to wash it out with simple water, the object being to bring the remedy into absolute contact with the diseased membrane.

Cleanliness must be enforced by frequent ablution, and especial care must be taken that no towel or other drying fabric be left where the family may use it, as the danger from viruleut ophthalmia is very great should this precaution be neglected. The basin must be thoroughly cleansed after each time of using, and the preferable way is to dry with small pieces of soft muslin, which are at once destroyed by burning, or otherwise put beyond reach of other persons. The patient is of course cautioned as to the danger of his own eyes from contact through the natural tendency to rub them if itching. I have never seen gonorrhœal inflammation of the nasal cavities, although such has been reported, and the liability to, or more strictly speaking, the prevalence of, gonorrhœal ophthalmia appears to be much less than it was some years ago. There is also reason to believe that all patients are not equally susceptible to this distressing complication, for I have repeatedly seen soldiers who paid no attention whatever to my caution, but used the same towel in common, where one or more in their mess had the "clap," and it served for drying the person in all varieties of ablution.

It is a very good plan, after the acute stage is passed and the flow is scanty, to adopt a simple wash of alumina et potassa sulphas, and to discontinue constitutional treatment unless a leaning toward "gleet" is apparent, when other measures are then called for. It would extend this paper too much to go into the treatment of this stage of the disease, but at a future time it will be taken up, together with orchitis and other accidents. It will be probably noticed that nothing has been said of the time-honored copaiba and cubebs. These, with sandalwood oil, Gurjun balsam, hydrastin, hamamelis, matico, pulsatilla, Venice turpentine, and other drugs, all have their place and are valuable, but from experience I am convinced that they need seldom be called on, and as they are more or less hard to take, disagreeable from eructation, and somewhat expensive as compared with the remedies noted above, it is well to try what can be done without them. Occasionally we meet with cases which show a tendency to exacerbation—better to-day and worse to-morrow, and here cubebs especially will come into play, particularly if a little exsiccated ferric sulphate is added. If improvement is not secured in three or four days, then add the balsam, and if still the case drags, hydrastin or matico will usually put a final check to the trouble. I believe ol. santal to be a more fancy article than a desirable therapeutic, yet it has its friends.

Look after the diet; prohibit salt and highly spiced meats, limit the use of tobacco, and stop alcohol in every guise. Tea and coffee in moderation as to strength and quality, are permissible; beyond that, allow milk or water only as a beverage. Keep the bowels soluble, enjoin early retiring, and of course put a rigid blockade upon sexual intercourse. There are people whose conscience is so elastic as to care simply for themselves, provided only their desire in this direction is gratified, and it is a popular notion with others that gonorrhœa can be "given away" by indiscriminate copulation, which with them is at once a cheap and easy cure. It is hoped that the younger readers of The Bulletin, in whose interest this article is written, will find something in it worthy of remembrance.

246 North Twentieth Street.

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PATENT MEDICINES.—We have been favored with the subjoined amusing scribble:

Do you suffer with heartburn, wind or pain in the stomach, sick headache, giddiness, fullness, and swelling after meals, dizziness and drowsiness, cold chills, flushings of heat, loss of appetite, costiveness, scurvy, and blotches of the skin, disturbed sleep, frightful dreams, cough, cold, shortness of breath, asthma, consumption, hoarseness, and oppression of the chest? Do you, I ask, suffer from all or any of these complaints? If so, why? Know you not that there are 1,001 medicines that will relieve you, nay, that will make you better than you have ever been before? Know you not that for the trifling sum of 1*s.* 1½*d.* you may purchase a box of pills worth a guinea?

I fear me though the pills are valued on the same principle as filthy pipes. A man who has the good fortune to possess a rank and black clay pipe will tell you that it is worth any amount. For some time I have been trying to find the market for dirty pipes. I know now where it is: it is "horse marines" who give the fabulous price for discarded pipes; they, too, are the only gentlemen who would care to give the full value for a box of pills.

Bilious reader, you may, perchance, be perplexed with the many pamphlets and bills you have read, and know not which medicine to choose. Let me assure you that there really is no difficulty in the matter. All patent medicines are the result of years of tedious research and scientific experiments; all have thousands of excellent testimonials; all have performed cures after the patient has been turned out of numerous hospitals as incurable; all will cure any and every disease. You have, therefore, but to go to any chemist's, or grocer's, or draper's, or ironmonger's, or huckster's, or tinker's, or tailor's, and ask for a patent medicine. Should you be asked which you prefer, say you have no choice, but will take just which comes first.

Personally I must confess that I have a weakness for those patents bearing a Government stamp, upon which Her Majesty's Honorable Commissioners of Stamps have ordered the proprietor's name to be engraved in white letters upon a red ground. What an artistic idea: white letters, the emblem of purity, standing alone on a red ground, the synonym for foul disease! The meaning is clear. Armed with a box of Her Majesty's Honorable Commissioner's of Stamps' pills, or a bottle of their physic, as the case may be, we are safe—naught can harm us.

What sympathizing and disinterested beings patent-medicine proprietors are! To what an expense they will go to warn mothers against giving their babes calomel and antimony; how carefully they distinguish between genuine and spurious medicines! One cannot help admiring these men; one feels that it would be almost bliss to die in the arms of a patent-pill maker.

I know there are many who have no faith in patents; many who would tell us that a doctor or surgeon is the proper person to employ in case of sickness. They tell us that the medical man has had an expensive education, that he has gone thoroughly into the subjects of anatomy, surgery, and medicine, and, therefore, he is the only competent person to treat disease. That is not my idea; medical men are too matter-of-fact for me. What care I if they have read "Sam Lung on the Air-vessels," or "John Bunyan on the Great Toe"? No; I like to have a little romance or poetry about my physic. What a sublime picture we have before us in the discovery of one of our leading patents! We see a meadow covered with

the richest verdure, a rippling brook flowing through the center, and an old decrepit woman grazing in the said meadow like an ox; but, lacking the instinct of an ox, she does not confine herself to edible herbs, but in a fit of absent-mindedness preys upon aconite and deadly nightshade. Two of her grandchildren, who have been sent out to watch their granny graze instantly rush upon the old woman and inform her that she has been eating poison. "Eureka!" exclaims the old lady, and commences to skip about the field like a lamb. "My children," that old woman cries when first that creature found a tongue, "for 40 years I have had a pain in the pit of my stomach, and this herb has cured me." Thus one of the greatest discoveries of the day was made. Now I have some faith in an experimental old woman like that.

I have often thought that I should like to be the proprietor of a patent medicine. I have several very good recipes. One I obtained from an old man, a regular weekly customer. It is as follows:

¼ oz. Ikery pikery
½ oz. Jolop
1d. Crossing suplement
¼ oz. Bitter Halloways

Make into a mass with soft sope, and cut into pils about the size of a bit of chork.

The old man tells me that these pills are good for "a'most anythink." I don't like to bring them out as a patent for fear of injuring my customer's trade, for he sells them every week upon the Market Square in boxes 12 for a penny.

I am also in possession of another excellent recipe, given to me by a man who calls himself a "hors doctor":

Oil of worms
Oil of brick
Oil of Saint John
Oil of spike
Oil of swallows
Oil of rat
Oil of rignum
Tinker of benjamin

Two penorth of each.

I am told that this will cure any case of rheumatiz. Although I frequently prepare this for the "doctor" I cannot conscientiously patent it, for I have but few of the ingredients in stock, and know of no house that can supply them.

Oh, that I were a homœopath! Would that I could believe in Hahnemann's theory, "Similia similibus curantur"! But I can't. I will tell you why. I used to read a great deal upon the subject, and found the theory good, but the practice faulty. One day I suffered very much from diarrhœa. "Now," said I to myself, "homœopathy shall have a fair trial. What is the cause of my complaint? Sour plums. Then sour plums shall be the cure"—they nearly killed me. I can't believe in the "like by like cured" system. If I did I would erect a monument, in the center of a town, something like a drinking-fountain. I would place basins all round with pipes leading to a reservoir, and over each basin I would have written—

"Stranger, here
Please drop your tear."

When the reservoir became filled with tears I would evaporate them to dryness, and dissolve each grain of salt produced in a gallon of water; then I would put it up in 2-drachm bottles, and label it "Dolorine; or Essence of Grief, a certain cure for every sorrow. Price only thirteen pence half-penny per bottle."

Any homœopath is welcome to make what use of this he pleases: the idea is not patented, and never will be, by me—I can't forget those plums.—*The Chemist and Druggist*, Jan. 14, 1882.

Wine of White Ash.—Within the past two or three years this preparation has been prescribed with great success by Dr. Chas. P. Turner, of this city, in the treatment of dysmenorrhœa and the troubles that so frequently complicate it; inquiries having been made regarding it, and it is in answer to these this paper has been written.

The botanical name of the tree is fraxinus Americana, lin,, white ash, sometimes written fraxinus alba, improperly so, as no botanical authority which I have consulted gives this as a synonym; Dr. Muhlenburg, the botanist, proposed the name of discolor, in consequence of the marked difference between the upper and under surfaces of the leaf.

The tree, which is one of the largest of our forest trees, reaching in favorable locations a height of 80 feet, with a diameter of 3 feet, is found mostly in swampy lands or on the margins of rivers; it flourishes in northern New York and northward in Canada, but is found in New Jersey, Pennsylvania, and farther south and west; its common name of white ash is most probably due to the color of the bark, by which it may be easily extinguished; on the trunk of the tree the bark is often deeply furrowed, and divided into squares of 1 to 3 inches; the foliage is made up of compound leaves consisting of 3 or 4 pairs of leaflets, with a terminal one; the leaflets being oval acuminate, petiolate and glaucous on the under side. An excellent plate, showing the leaf half the natural size, and the fruit of full size, is given in Michaux's "North American Sylva," from which this description has been taken.

The bark, as found in commerce, is usually concised transversely, and when dried is of a light salmon color, of very slight odor, and bitterish taste. The virtues are best extracted by a weak alcoholic menstrum. The following formula yields a preparation which Dr. Turner has found most useful in practice:

Take of inner bark of the White Ash, powd. No. 40, ℥ viii.
Sherry wine sufficient for Oii.

Macerate the bark for three days, pack firmly in a cylindrical percolator, and displace slowly two pints.

The wine thus prepared has a color of brown sherry, and a taste quite peculiar. The usual dose is a teaspoonful three times a day.—*Amer. Jour. of Pharmacy*, Feb., 1882.

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On the Use of Carbolic Acid in Therapeutics.—M. Raymond employs carbolic acid or carbolate of soda in doses from 15 to 30 grains a day in the treatment of typhoid fever. By the use of this drug, he says, a notable lowering of the temperature is obtained, which may last as long as 6 hours. At the same time an increased secretion of sweat is observed; which, however, has no direct relation to the lowering of the temperature. The duration of the typhoid fever is not shortened by this method; in fact, convalescence is sometimes even longer. M. Raymond has also obtained excellent effects from carbolic acid in acute erysipelas. He employs as a lotion a 50 per cent. solution, and gives carbolic acid internally, and carbolate of soda in injections. This medication gives no appreciable result in tubercular patients. Inhalations of carbolic acid appear to be favorable in whooping-cough. A 20 per cent. injection of carbolic acid into the pleura in a case of empyema had no bad results. M. Hallopeau in commenting on these facts, says that they show, in common with some communicated by himself, that carbolic acid does not lower the temperature by causing perspiration. Carbolate of soda in typhoid fever lowers the temperature for many days. He searched for carbolic acid in the fæcal matters, but did not find any. In contradistinction to M. Raymond, he thinks that this substance does exercise an influ-

ence on the duration of the disease. In tuberculosis it lowers the fever, but not in a constant way. M. Hanot, after administering carbolate of soda to a patient suffering from typhoid fever, noted the production of a special confluent pustular eruption. The fluid of these pustules contained a multitude of bacteria. The temperature became notably lowered from that time, and there was a veritable crisis. M. Hanot gave 15 grains of carbolic acid a day, divided into two enemata.—*Jour. de Méd. de Paris—Brit. Med. Jour.*

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THERAPEUTIC ACTION OF QUININE.—Some recent discoveries in the therapeutical action of quinine may be of interest to our readers, and we give them here. It has been noticed that the action of duty-free quinine is radically different from that of duty-paid. Upon the American manufacturer the duty-paid quinine has for years been noticed to act as a tonic, with an exhilarating effect, producing corpulency and a sleek, well-kept, healthy appearance upon the body; mind uninjured and able to compute figures into the millions, without apparently tiring the brain; total lack of foreboding evil; vision keen and far-sighted, able to see both sides of an object; general indications tending to long life and perfect health.

Unfortunately, there being no more duty-paid quinine, the patients have taken doses of free quinine with the most unsatisfactory results. The exhilarating effect was lost; a depressing effect was noticed, increasing with the dose; an anemic condition; countenance indicating mental worry; mind disturbed and unable to retain certain figures and dates; forebodings of evil continually before them; imaginations of financial disaster; near-sightedness, able to see only one side of objects; frequent calls upon the attendant for help from impending dissolution; cries out that the attendants are doing him an injustice; his native country, is in his mind, an oppressor. These results being so alarming, a meeting of the Western Wholesale Drug Association was held, and at the urgent request of Mr. A. H. Jones, a personal friend of one of the patients, it was decided to object to further administration of the free quinine, and administer duty-paid quinine in doses half as large as formerly.—*Pharmacist and Chemist.*

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ON OPHTHALMIA NEONATORUM AND ITS PREVENTION.—Dr. Karl Grossmann points out that ophthalmia neonatorum may affect the eyes of a child born of a mother who has a vaginal discharge, not necessarily of the purulent character belonging to gonorrhœa or fluour albus. It seems, therefore, that before and during birth the secretions often acquire a character quite as infectious as that of gonorrhœal discharge, though they appear in no way different from the physiological discharge of the mucous membrane. He therefore directs that every child, without exception, whether of a healthy mother, or of a mother suffering from leucorrhœa, should have the closed eyelids washed and cleaned outside with a 2 per cent. lotion of carbolic acid as soon after birth as possible. When this has been carefully done, the eyelids must be inverted to complete ectropion, with exposure of the conjunctival tarsi. Then, after carefully removing every trace of flaky secretion which may be found there, the conjunctiva may be inundated with the 2 per cent. carbolic lotion for one or two minutes, care being taken that the lotion reaches every part of the conjunctival sac. This proceeding ought to be repeated thrice a day during the first two days of life. If the catarrh in the vagina of the mother has been very severe, a pad soaked in the carbolic acid should be applied to the eyes of the child in the interval between the application of the lotion, and renewed every half hour during the daytime.—*Brit. Med. Jour.*

TREARMENT OF HEMORRHOIDS BY HAMAMELIS.—Mr. Datu Ganesh Subnis, assistant surgeon, and lecturer of anatomy and physiology in Ahmedabad medical school, India, reports to the Grant college medical society the results of the use of tincture of hamamelis in arresting bleeding from internal piles. We quote the proceedings of the monthly meeting of this society as follows:

"Mr. Datu had seen the good effects of hamamelis in five cases of multiple venous piles of moderately large size, occurring in persons, all males, between the ages of 25 and 40 years. In all, there was profuse hemorrhage, as the pale appearance of their countenance distinctly indicated. In one, the piles were of five years' duration and bled on the least straining; in the others, they bled during the time of defæcation only, and had stood for nearly three years. Three drops of tincture of hamamelis were given internally four times a day, and a liquid composed of one drachm of the tincture with three ounces of water was injected before going to bed and retained; all stimulants and stimulating articles of food being strictly interdicted. As a rule, the bleeding was checked within four days. As a precautionary measure, the treatment was continued for a fortnight more. In one or two cases, the bleedidg returned within three months after the discontinuance of the remedy, but was again checked on resuming the treatment. The piles in all were reduced considerably in size.—Report of Monthly Meeting of Grant College Medical Society, India.

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THE TREATMENT OF THE VERTIGO OF BRIGHT'S DISEASE.—Dr. Robert Saundby says that even while we cannot hope to effect a cure of the disease itself, it is often of the greatest moment to be able to relieve a symptom which is rendering life worthless. Vertigo is not a very common symptom in chronic Bright's disease; but though it does not receive much attention from text-book writers, when present it is a very serious matter to the sufferer, and aften takes a pre-eminent place in his own account of himself. After trying various remedies, Dr. Saundby has found the greatest benefit from caffein or thein in doses of one, two, or three grains in pill, three times a day.—*Brit. Med. Jour.*

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SEA SICKNESS, ITS CAUSES AND TREATMENT.—The subject of sea sickness is always one of interest, and, is as yet, very little understood. Dr. Nunn has recently published quite a comprehensive paper on its causes and treatment in the Lancet, recommending what appears to be common sense instructions, to be followed by those who propose to take an ocean voyage. He traces the cause of this disorder from the symptons hoping, that from a careful consideration of each symptom as it occurs may help us to better understand the true causes, and to suggest a remedy. He goes on to say: In all cases of sea-sickness, the actual vomiting is preceded by certain sensory impressions. I allude more particulary to the disgust of the sense of sight, smell and taste. For instance, most of us have observed that the sight of a person actually sick will precipitate vomiting in another; so also are we very prone to be annoyed by certain smells which, under ordinary conditions, we should take no notice of, an odor which in most cases may be the reverse of unpleasant. Sea-sickness is generally accompanied by a sensation of chilliness and cold perspiration. Extreme pallor of the face is noticed before vomiting; this pallor is not altogether like that preceding faintness, and as a rule is not accompanied by giddiness. This syncopic condition is, I think, is more allied to that of a shock which occurs in a strangulated or intussuscepted bowel, or from a severe blow over the abdomen. A knocking, or sensation of pulsation in the head, is often complained of by some people at this period. An excess of saliva (liberated probably by

a paralytic condition of the ducts) is generally noticed in the mouth before sickness. The vomiting is usually sudden, with free discharge of contents of stomach. For a few moments after the vomiting the sick person feels somewhat better, but the nausea and vomiting soon return, and become as horrible as before. The feeling of utter prostration which comes on at that period only too well known to most of us, and need not be described. If the voyage be a long one, the excessive condition of prostration, with inability to take food, may cause the condition of the patient to become serious. Constipation due to a cessation of the normal peristalsis, may also become a dangerous symptom.

*Causes.*—The causes of sea-sickness are undoubtedly in the first instance mechanical. If it were possible to make a tracing of the movement of the vessel with the same accuracy that the pulse and respiration can be taken, we should find that no two successive movements were equal, either of time or swing or direction. No two waves are of exactly the same height, nor does the ship rise over them in the same period of time. It is an impossibility to get absolute rhythmical or synchronous movement. In consequence, then, of this great irregularity of move the voluntary but automatically acting muscles of the abdomen are unable to fulfil their duty of pressing and supporting the contained abdominal organs. In other words, they are reflexly unable to appreciate the exact movement of time when the upward and downward movement of the vessel takes place, and are unable to act effectually. Want of support and due pressure on the contained abdominal organs permit greater latitude of movements, and especially increase the downward movement of the small intestines on their attached mesentery. These parts are perhaps more mobile than any other part, and the mesentery being very highly endowed with nerves, ganglia and blood-vessels, a disturbance and discomfort must soon occur from the unaccustomed pitching and stetching that ensue, especially on the downward movement of the vessel. In connection with this loss of tonic support by the abdominal muscles it is easy to understand how persons with pendulous and flaccid abdomens suffer as a rule more intensely from sea-sickness than others. The want of normal pressure by the abdominal muscles and a continuation of the deflection and undue stretching of the intestines on their mesentery soon produce nervous-shock and paralysis, more especially to those branches of the sympathetic which are connected with the small intestines. and those vaso-motor branches which control the calibre of blood vessels. The normal tonic contraction of the arteries, which should exist, gives place to vascular dilatation and the blood in these vessels becomes increased. The arteries of the abdominal area are more dilatable than those of any other area, and this with the loss of resistance in the vessels will petmit the admission of an undue amount of blood. This extra blood is abstracted from the general circulation, and consequently other areas become anæmic, and their tone lowered. From the evidence of syncope before mentioned, it is quite clear that there is a defective supply of blood to the head and extremities. The defective tone of the cerebral circulation may account for the sensation of knocking or pulsation in the head so often experienced in sea-sickness. The immediate cause of actual vomiting may be due to the excessive irritability of the periphery of the nerves of the stomach and intestines, due to the before mentioned hyperæmia, or to the anæmic and disturbed circulation of the brain and spinal cord. The nausea which some persons feel when riding with their backs to an engine or horse; although less in degree, is susceptible of a similar interpretation. For instance, when a person rides back to the engine (or horse), any continuous jarring or irregularity of the moving vehicle tends to throw the mesentery and bowels from their spinal attachment forward, and so stretch them; but when riding face to the engine, the tendency is to throw the bowels and mesentery on their spinal attachment in the reverse way, and consequently without any stretching of the nerves or vessels. The abdominal muscles, acting also as a guard, appreciate the shock first and press upwards.

*Treatment.*—From the foregoing remarks on the symptons and probable causes of sea-sickness, it will now be readily understood that anything that decreases the mobility of the abdominal organs or mesentery tends to check the severity of sea-sickness. Following out this practice, I always recommend the taking of a brisk aperient pill, either compound rhubarb or aloes, on the evening previous to a sea voyage. This removes all solid matter, and by so doing lessens the pendulous action of the intestines on their mesentery. The vacuum produced is replaced by certain gaseous matters, which I think, are rather beneficial than otherwise. This leads me up to refer to the value of most effervescing drinks, such as champagne, soda water, zoedone, etc. The benefit resulting from these is due, I think, to the liberated carbonic acid gas; this gives pressure and support to the abdominal organs from within, and renders them less liable to be depressed. The inhalation of nitrite of amyl has at different times been recommended for the disorder, and sometimes used benefically, but it relieves only one of the symptons of sea-sickness—viz., the syncope. It is a dangerous remedy if persisted in, and should never be used except under the directions of a medical man. Chloral and morphia injections can only act by their power of narcosis, which causes a blunting of peripheral and central sensibility.

Pressure over the abdomen is by far the most hopeful remedy we possess. A well-made mechanical appliance especially designed for this purpose, and made for me by Messrs. Maw, Son & Thompson, Aldergate St., I have found it most efficient. This supports fixes and abdominal ogans, it also helps to do the work of the abdominal muscles until they become sufficiently educated to reflexly appreciate the exact moment when their duties should be performed. Bearing upon this latter point, it is to know that old sailors, after a long Pacific voyage, where the seas is regular and very large, frequently become sick when crossing the British Channel and the Firths, where the waves are short and choppy, and the movement of the vessel very different from that which they have been accustomed to. In this case the abdominal muscles of the sailors have been well accustomed to one kind of movement, but are utterly unable to appreciate the other. It is found by experience that if the abdominal muscles can be kept in an almost continuous state of contraction, the tendency of sea-sickness is very much lessened. We can do this either by strongly willing to make these muscles contract, or by a continuous expiratory effort as in singing or in whistling; but most will agree with me that this would be by far too tedious a procedure to recommend.

It is well known that certain positions in a vessels are more likely to provoke sea-sickness than others. For example, an upright position with the back to the bow of the boat, and at one or other extremity of the vessel, is more likely to produce sea-sickness than the horizontal in the centre would be. If from any cause the voyager is unable to assume the recumbent position, the next best thing it to sit down on a low chair or stool, with the knees drawn up to the body, the body being bent forward and a roll of clothing pressed between the stomach and the knees. I have often noticed that this position gives relief, the extreme pallor of the face changing to a normal color.—Dr. P. G. Nunn, in *Lancet*, Dec. 18, 1881.

## New Remedies.

RHUS AROMATICA, AITON—FRAGRANT SUMACH.—Syn. Sweet Sumach, Stink or Skunk Bush. Nat. Ord. Anacardiaceæ.

The fragrant sumach is a small aromatic shrub, not poisonous, growing in dry, rocky soil, in hedges and thickets, in Canada and the United States. Its height varies from three to six feet; it is erect, sometimes decumbent, branching, glabrous. The stem has a large pith, of a pinkish color, and a thin circular layer of white wood, which is covered with a thin bark, the outer surface of which is of a brown-gray color, the inner surface yellowish-green. The leaves are alternate, petiolate, exstipulate and trifoliate, with sessile, dark green, rhombicovate, unequally cut-toothed leaflets, two to three inches in length; pubescent when young, thickish when old. The lateral leaflets are uneven at the base, while the larger terminal one is wedge-shaped. The flowers are in close aments preceding the leaves; yellowish, with a five-lobed glandular disk. The fruit is drupaceous, subglobular, one-fourth of an inch in diameter; scarlet, densely covered with purplish-red hairs, and incloses a roundish, slightly flattened, oblong putamen. It has an odor similar to that of rose geranium, and a pleasant acidulous taste, and ripens in May and June.

The roots are branched, vary in diameter from 1-12 to ½ inch, and contain a whitish ligneous meditullium interspersed with ducts, which are not apparent to the naked eye. The bark, which is the medicinal portion, is in quills, one to four inches in length, 1-16 to ½ inch in diameter, and from 1-20 to 1-12 of an inch thick. The outer surface varies in color from light to dark brown, and is marked with corky protuberances and transverse fissures. When the corky layer is removed the outer bark is brought to view, which is of an orange-red color, is longitudinally wrinkled and transversely fissured. The inner surface is whitish or flesh-colored, and striate. The bark is brittle, breaks with a somewhat granular fracture, yields an ochre-colored powder, and has a distinct, rather pleasant odor, more marked when green than when dry; its taste is astringent, aromatic and slightly bitter when fresh, with a flavor peculiar to the plant from which it is derived. It should be collected in the spring of the year.

Upon microscopical examination the bark appears to be radially and tangentially striate, and is marked throughout with oil tubes and crystals, as is shown in the accompanying drawing.

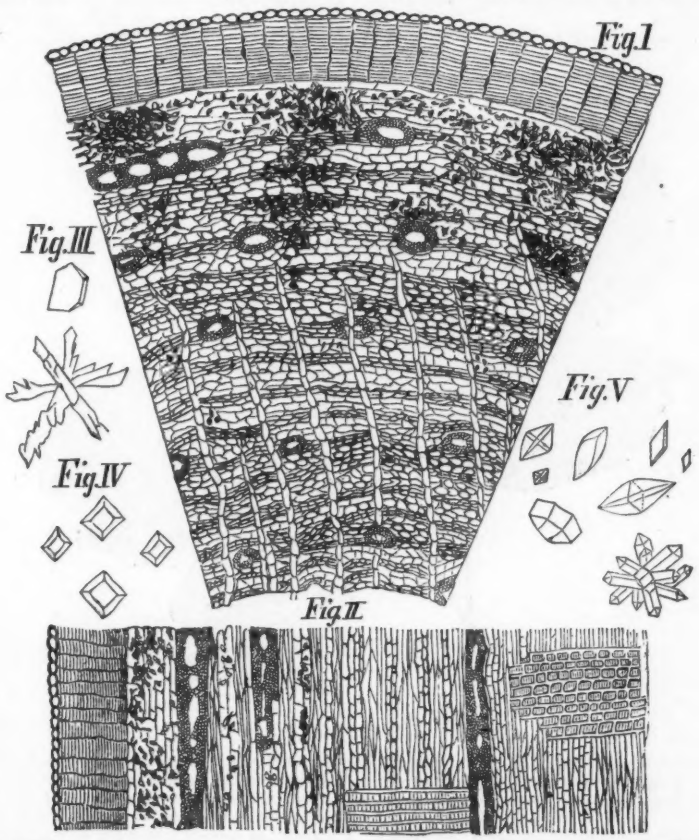


Fig. I. A transverse section of the bark magnified to about forty or fifty diameters. The epidermis consists of a single row of cells, the walls of which are of a dark brown color. The corky layer is somewhat lighter brown, and the cells number, radially, from sixteen to twenty-five; mostly, however, eighteen. The first layer beneath the cork consists of three rows of flattened tangentially elongated parenchyma cells, followed by one of loose parenchyma and sieve tubes. The next layer consists of three rows of bast cells, interrupted by oil tubes. The succeeding layers are composed of ordinary parenchyma, sieve tubes and bast cells, some of the rows of the latter being interrupted by oil tubes the same as those just described. The medullary rays extend more than

half through the bark and consist mostly of a single row of cells. The oil tubes are generally in the bast rows, arranged with some regularity. In some of the sections examined three or four of the oil tubes were found coalesced, as in Fig. I. The bark is studded with crystals, which seem to be mostly confined to the portion beyond the medullary rays. The crystals were examined under a high magnifying power, which showed them as represented in Figs. III, IV and V, the latter predominating, only a few of Figs. III and IV being clearly made out.

Fig. II. A longitudinal section of the bark, in a radial direction (magnified the same as Fig. I), showing the longitudinal arrangement of the tissues, oil tubes, crystals, sections of two medullary rays being quite prominent.

Fig. III represents crystals of the phosphates, Fig. IV crystals of the chlorides, and Fig. V crystals of oxalate of calcium as they appeared under a high magnifying power.

*Chemical Investigation.*—Five grams of the air-dry bark subjected to a heat of 100°C. until it ceased to lose weight, weighed 4.651 grams, showing a loss of .349 gram — 6.98 per cent. amount of moisture.

Five grams of the air-dry bark were incinerated, and yield .644 gram of ash, equal to 13.85 per cent., of which 16.967 per cent. was soluble in water, 74.007 per cent. soluble in hydrochloric acid, and 9.025 per cent. soluble in boiling sodic hydrate. An analysis showed the presence of potassium, sodium, aluminium, calcium and silica, combined as sulphates, chlorides and phosphates in the aqueous solution, and as phosphates and carbonates in the portion soluble in hydrochloric acid; the carbonates very likely were produced during the incineration.

Twenty grams of the powdered bark were exhausted with pure benzol by maceration and percolation; the percolate was allowed to evaporate spontaneously, yielding an extract weighing 1.272 gram — 6.36 per cent. This extract was treated with warm water, allowed to cool, filtered, and filtrate tested for alkaloids and glucosides with negative results. The undissolved extract was removed from the filters and dishes by solution in benzol, the benzol solution again evaporated to dryness, the residue treated with warm dilute sulphuric acid, allowed to cool and then filtered. The filtrate was tested for alkaloids and glucosides; negative results. The still undissolved residue was thoroughly washed with water to free it from any adhering sulphuric acid, treated with absolute alcohol, filtered, and the filtrate evaporated. This left a soft oily mass, of an acid reaction, entirely soluble in either, benzol, volatile and fixed oils, partly soluble in alcohol, sp. gr. .817, and aqueous alkalies; it has a peculiar odor, and an acrid, somewhat bitter taste, similar to that of copaiba, is soluble in concentrated sulphuric acid, with a deep brown color; strikes a similar color with concentrated nitric acid, but is insoluble in it, and gives with concentrated nitric and sulphuric acids a red-brown color, which turns lemon-yellow.

This substance was considered to be an oleo-resin, as it left a permanent greasy stain upon paper (fixed oil), and when treated with alcohol, sp. gr. .817, and the filtrate evaporated, left a residue of a resinous nature which gave reactions with sulphuric and nitric acids, the same as those noted above. The fixed oil was boiled with a solution of sodic hydrate, filtered and precipitated with a solution of sodic chloride; the result was a yellow-brown soap.

A fresh portion of the benzol extract was dissolved in ether, allowed to evaporate spontaneously, redissolved in ether and evaporated a second time, when the odor of butyric acid was produced. It was then treated with potassic hydrate, alcohol and sulphuric acid, and when heated the odor of ethyl butyrate was produced.*

* $2(C_4H_7O.OH)+2KOH=2(C_4H_7O.OK)+2H_2O$
$2(C_4H_7O.OK) + 2(C_2H_5OH) + H_2SO_4=(C_4H_7O.OC_2H_3)+K_2SO_4+2H_2O.$

The drug exhaused with benzol was dried and treated with stronger alcohol until the percolate left no residue when evaporated; the entire percolate was carefully evaporated, the extract weighing 4.774 grams = 23.87 per cent. The extract was treated with several portions of absolute alcohol, sp. gr. .7938 at 15.6°C.

*A.* Soluble in Absolute Alcohol.—Evaporated to dryness, powdered and treated with distilled water.

*a. Soluble in water, acid reaction*

$a_1$. *Precipitate by subacetate of lead.* — Ochre color; was washed, suspended in water, saturated with hydrosulphuric acid to precipitate the lead, filtered, filtrate boiled to free from $H_2S$; the amber-colored solution reduced Fehling's solution when heated, formed precipitates with solutions of gelatin, tartrate of antimony and potassium and ferric chloride, the latter giving a blue-black, which is altered only a very little upon boiling. These reactions show the presence of tannin, the reduction of Fehling's solution being due, probably, to a contamination with glucose. Negative reactions for alkaloids. The tannin thus obtained, after continued treatment with acids, gave reactions with milk of lime, nitrate of silver and ferric salts, identical with those produced by gallic acid; this, therefore, seems to be a *gallotannin*.

$a_2$. *Filtrate from precipitate by subacetate of lead.* —The lead was precipitated by hydrosulphuric acid, the filtrate boiled to free from $H_2S$; concentrated and divided into several portions:

1. Acid reaction (from the acetic acid of the lead), mercurio-potassic iodide gave *no* precipitate; absence of alkaloids.

2. Solution of iodine in potassium iodide; no percipitate; absence of alkaloids.

3. Reduces Fehling's solution without heating; glucose.

4. Evaporated to dryness, the residue had a sweet taste and a somewhat aromatic odor; was soluble in water and alcohol and consisted of two portions, one soluble in a mixture of alcohol and ether (3 to 1), the other insoluble in this menstruum. Both reduced Fehling's solution without the aid of heat and were considered to be "extractive" matter and glucose.

*b. Insoluble in water,*

$b_1$. *Soluble in dilute sulphuric acid.*—Coloring matter only; soluble when heated, deposited upon cooling. Negative reactions for glucosides and alkaloids.

$b_2$. *Insoluble in dilute sulphuric acid.*—Entirely soluble in dilute ammonic hydrate, reprecipitated upon the addition of an acid. This was considered to be an acid resin; it was thoroughly washed and its characteristics noted as follows: Blackish-brown color, brittle, lustrous, opaque in mass, translucent in scales. Odor and taste similar to that of parched coffee; concentrated alcoholic solution has an acid reaction. Insoluble in cold water, ether, benzol and dilute acids; soluble in boiling water (reprecipitated upon cooling), alcohol and alkalies. Concentrated sulphuric acid dissolves it slowly; the solution is dark-brown at first, assuming a pinkish hue around the edges upon standing. Ferric salts give a black precipitate not unlike that produced by tannin. Its solution in alcohol is wholly precipitated by an alcoholic solution of acetate of lead, the precipitate being of a yellowish color at first, but changes to a dark-brown. The resin is dissipated at a red heat, and when boiled with dilute sulphuric acid, the solution treated with barium carbonate to get rid of the acid, the resulting solution does not reduce Fehling's solution—proving that the substance is not a glucoside.

*B.* Insoluble in Absolute Alcohol.

*c. Soluble in water.*

$c_1$. *Precipitate by subacetate of lead.*—Coloring matter only.

$c_2$. *Filtrate from precipitate by acetate of lead.*—The excess of lead was precipitated by hydrosulphuric acid, the filtrate boiled, divided into three portions, two of which were tested for alkaloids and glucosides with negative results. The third portion was evaporated to dryness. A crystalline substance of an amber color remained, which, upon analyzing proved to be sodium and potassium salts together with a little organic matter.

*d. Insoluble in water.*

$d_1$. *Soluble in dilute sulphuric acid.*—Coloring matter only.

$d_2$. *Insoluble in dilute sulphuric acid.*—A small amount of 'extractives" and color substances remained.

The drug previously exhausted with benzol and alcohol was exhausted with distilled water. An aliquot part of the aqueous solution was evaporated to dryness, and the per cent. extracted by water estimated, which amounted to 4.85. The reserved solution yielded, with alcohol, a gummy precipitate which, with ammonic oxalate, was found to contain calcium. Coloring matter was also extracted by water.

The drug remaining after the above treatment was free from odor and taste, so it was not thought necessary to carry ths analysis further.

A decoction of the fresh bark gave a blue reaction with solution of iodine in potassic iodide, indicating the presence of starch. The absence of starch granules in the microscopical sections is due to the fact that the bark from which they were made was previously repeatedly boiled with water to clear the tissues.

The bark treated with solution of potassic carbonate (to extract the organic acids) yielded an extract containing an oxalate, but free from malates and tartrates.

The fresh bark, when distilled with water, yielded a volatile oil, which, when first distilled has a disgusting odor resembling very much the odor of bed-bugs, but when the distillate is treated with ether, the ethereal solution allowed to evaporate, the oil remaining left in contact with the air for 24 hours, it acquires a pleasant odor, distinct in itself.

*Recapitulation.*—

1. Moisture: 6.95 per cent.

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|---|---|
| 2. Ash: 13.85 per cent. | Sol in $H_2O$. 16.967 per cent. (K and Na together with the radicals of $H_2SO_4$, HCl and $H_3PO_4$. |
| | Insol. in $H_2O$. Sol. in HCl. 74.007 per cent. (Al, Ca and a trace of Na with radical of $H_3P_4O$). |
| | Insol in $H_2O$, and HCl. Sol. in NaOH. 9.026 per cent. (Silica). |
| 3. Benzol extract: 6.36 per cent. | Consisting of volatile and fixed oils, resin, wax, and butyric ac. |
| 4. Alcoholic extract. 23.87 per cent. | Tannin, glucose, an ac. resin, "extractive" and coloring matter. |
| 5. Cold water extract: 4.85 per cent. | Gum and coloring matter. |
| 6 Decoction: | Starch, etc. |
| 7. Potassic carbonic extract: | Oxalates, etc. |
| 8. Distillation with water. | Volatile oil. |

*Medical Action and Uses.*—Rhus aromatica was introduced to the profession at large in the spring of 1878 by Dr. J. T. McClanahan, of Boonville, Mo., as "a remedy highly useful in the treatment of diabetes, enuresis, hæmaturia, uterine hemor-

rhages, menorrhagia and other other excessive discharges, accompanied by a relaxed condition of the uterus, diarrhœa, and other atonic diseases of the bowels." Drs. John Gray and F. McClanahan had used this remedy extensively in their practice in such cases as above mentioned with marked benefit, but left it for the son to bring it before the public. Since its introduction many physicians have tested its virtues, and their statements corroborate those of the discoverers.* That it is an efficacious remedy in the treatment of enuresis there can be no doubt, for the author of this essay has seen it tried with success in several cases. A tincture containing the oleoresin, acid resin, gallotannin, and extractives of the crude drug, and representing 4 Troy ounces to a pint of stronger alcohol may be made by macerating the ground drug in the menstruum for 7 days, with frequent agitation, and then percolating until one pint of tincture is obtained. It is obvious that preparations of rhus aromatica should not be mixed with solutions containing salts of iron.

The dose of the powdered drug is from 20 to 60 grains (gm. 1.3 to 4.0); the fluid extract 5 to 40 drops (gm. .3 to 2.5); the tincture 20 drops to a teaspoonful (gm. 1.0 to 4.0) given in water and repeated as often as necessary. As a topical remedy to control hemorrhage, a decoction of the bark will be found efficacious.

In conclusion, I desire to state that the process followed in the chemical investigation, was the one reported by Mr. Henry B. Parsons in the American Journal of Pharmacy, 1880, p. 210; the analysis was made in the laboratory of the Philadelphia College of Pharmacy, under the supervision of Prof. J. M. Maisch and Dr. F. B. Power, and I am indebted to Mr. F. L. Slocum for the use of his microscope, with which I have been enabled to produce the drawings of the sections.—*Amer. Jour. of Pharmacy*, May, 1881.

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THE PHARMACOLOGY OF RHUS AROMATICA.—Dr. D. E. Smith, of Brooklyn, in the Medical Tribune, has formulated a synopsis concerning the materia medica, pharmacy and therapeutics of rhus aromatica, covering the introduction of the drug and what is known about it at the time of his writing. We reproduce his report:—ED.

Rhus aromatica is a comparatively new, but none the less valuable remedy. I have not been able to find an analysis, or even a mention of the name, in any botany which I have consulted, though there are ten varieties of the rhus spoken of by botanists. These seem to be divided into two distinct classes—the poisonous and the non-poisonous. Among the former may be classed the rhus toxicodendron, and among the latter the rhus glabrum. The aromatica, being non-poisonous, may also be classed among the latter.

Dr. J. T. McClanahan, of Boonsville, Missouri, was the first to introduce the rhus arometica to the profession, which he did through the Eclectic Medical Journal of Cincinnati, in 1879, on page 317. The remedy appears to have been a kind of an heirloom in the family. The doctor says: "This remedy was successfully used by my grandfather, Dr. John Gray, for over thirty years, as a sovereign remedy in the treatment of diabetes, and to this use alone he confined it, and for many years after was used in the same capacity by my father, Dr. F. McClanahan. He it was, I believe, who first suggested its use in other diseased conditions of the genito-urinary organs. It never having been analyzed or classified in any botany at that time, it was known and used by them under the name of sweet sumac."

The doctor certainly deserves, and I think has, the credit of all liberal physicians of bringing into general use this valuable addition to our materia medica. The shrub has recently been analyzed, and Wood's Class Book of Botany speaks of it under the generic name of rhus, and the specific name of aromatica. Gray, I understand, has also noticed it in the recent edition of his work on botany. The common names of rhus aromatica are stink-bush, skunk-bush, sweet sumac, fragrant sumac, etc. In the Supplement to the American Dispensatory, just issued by King & Lloyd, there is a very good description of it. Speaking of rhus aromatica, the Supplement says: "This is a small bushy shrub, growing from two to six feet high, and found in clumps throughout sections of the eastern United States, in rocky situations. The leaves are trifoliate, and on stalks about an inch in length. The flowers are small, greenish-yellow, and open in April before the leaves; they are in stalked, spiked, ament-like clusters, and before flowering have the appearance of an unexpanded catkin. The fruit is a small red drupe, about the size of a pea, covered with dense white pubescence. They are produced in clusters of about a dozen, and are on stalks about half an inch long; each one contains a single flattened seed. It is common throughout the western states and territories."

The part employed in medicine is the root, or, rather, the bark of the root. When dry the root is from one-fourth to one inch in diameter, and from four to twelve inches in length. Externally it is dark brown in appearance, while internally, or the part next to the body, is of a pinkish color, in which may be found little cavities, containing a transparent balsam resembling balsam of fir, and which is supposed to be the medicinal virtues of the shrub. "When fresh the wounded bark exudes a turpentine-like balsam, or solution of a resin in some valatle oil, which dries to a glossy tear or layer."

In making the saturated tincture or fluid extract, pure alcohol alone must be used, as any additional water will give a milky appearance to the tincture. Like other varieties of the rhus, the aromatic is an astringent. The Supplement also says: "At first this remedy was confined to the treatment of diabetes, and other excessive discharges from the kidney and bladder, as well as to cases of incipient albuminuria. More recently it has been employed by numerous practitioners, who, in addition to the above-named maladies, have found it advantageous in urethral irritations, hemorrhage from the stomach, lungs, kidneys, bladder or uterus, chronic laryngitis and bronchitis, and especially useful in the enuresis of children and aged persons. We are aware of the value of this agent in several of the diseases referred to, and should subsequent experience prove its efficacy in the earlier stages of albuminuria, it will rank among the first therapeutical remedies of our materia medica."

During my earlier professional experience, it was my fortune, or rather misfortune, to have a large number of patients to treat for enuresis or incontinence of urine. Scaree a week passed that I was not consulted by some young mothers for advice and a prescription for their children for "wetting the bed," as they termed it. I prescribed remedies both simple and compound, that I thought suitable in such cases. I also gave nearly all the remedies recommended by others. These medicines would frequently relieve, but never cure, and my ears were continually saluted with these words: "Doctor, the medicine you gave me for child did no good. He is the same as he was before you prescribed." I was so annoyed. that I really dreaded being asked to prescribe for that difficulty. A case of cholera, dysentery, pneumonia, and

*Its physiological actions have not as yet been deduced; so it is almost impossible to state which constituent of the plant its beneficial effects are due to. Very likely, the gallotannin contained therein contributes largely to its influeace over the various discharges for which it is recommended, but that its entire action on the economy is due to this agent is questionable. It certainly gives some results that are given neither by gallic nor tannic acid.

most other diseases I could look squarely at, and treat with the prospect of a speedy cure, but this terrible enuresis, simple as it appears, gave me much trouble, and I dreaded it worse than a case of small pox. I consulted different authors and physicians with reference to its cure. Among the latter was our friend Dr. Hermance. He assured me, with his usual positiveness, that he had a sovereign remedy which would always cure this disease. You may imagine with what pleasure and satisfaction I copied his formula for enuresis which was as follows:

℞ Pulv. resin, ʒi.
Pulv. sacch. alb., ʒii.

Mix, and give one teaspoonful night and morning.

I was not long in triturating these articles together, and putting up a package for trial, as I almost always had a little sufferer on my hands who was thus afflicted. But, like all other medicines to cure enuresis, this positive remedy failed, and I was again compelled to look elsewhere.

My experience in the use of the rhus aromatica commenced in 1879, the patient being a Mr. S., æt. 78 years, and a sea captain by occupation. His disease was incontinence of urine, with which he had been afflicted for many years, and was caused by atony or weakness of the bladder, which prevented him from retaining the contents of that viscus by the command of his will. There was a continual dribbling of the urine, whether in his parlor, the church, or the street, and with no ability on his part to prevent it. This condition of things was a source of great annoyance to him, and made his life anything but pleasant. He had consulted many physicians, and tried numerous remedies for this disease, if we may so term it, with no material benefit. About this time I read Dr. Clanahan's monograph on the therapeutic action of rhus aromatica, I was consulted by Captain S., relative to the complaint above alluded to, and at once resolved to test the remedy in his case. I prepared the following prescription, ordering him to take one teaspoonful of it before each meal, and at bedtime:

| | | GRAMS. | |
|---|---|---|---|
| ℞ | Rhus aromatici, fl. ext., | 40 | oo—ʒx. |
| | Glycerinæ, | 8 | oo—ʒii. |
| | Aquæ, q. s., ad. | 128 | oo—ʒiv. |

M.

In 36 hours from the time he began taking the above prescription, there was a perceptible improvement, and by the time he had finished the medicine he was well, and has remained so ever since. Of course, I felt confidence in the remedy after its prompt action in so aggravated a case, and resolved to test it still further. An opportunity soon presented itself, in the case of a boy about six years of age, residing in Monroe street, this city. His mother informed me that he was afflicted with enuresis, with which he had always been troubled. She also told me she had given her boy various medicines, prescribed by different physicians, with some apparent benefit, but nothing of a permanent character. I prescribed for him the following:

| | | GRAMS. | |
|---|---|---|---|
| ℞ | Rhus aromat., fl. ext., | 16 | oo—ʒss. |
| | Glycerinæ, | 64 | oo—ʒii. |
| | Syrupi simp., | 16 | oo—ʒss. |
| | Aquæ, q. s., ad. | 128 | oo—ʒiv. |

Mix, and take one teaspoonful three times a day.

This was taken regularly until finished, and produced marked benefit, but did not cure him. Instead of wetting the bed every night, as formerly, it occurred now but two or three times a week. I ordered the prescription repeated, with the directions to take it four times a day instead of three. This cured him, and he has remained well ever since, which is now some months.

Last summer I prescribed the remedy in a case of catarrh of the bladder, the patient being a man about 70 years of age. Soon after I gave the medicine to this patient, I went on my summer vacation. The patient fully recovered, but whether from the remedy I gave him, or was cured by another physician, I did not learn. I am now giving the rhus aromatica to a young man afflicted with incontinence of urine. He has been taking it about ten days, with what effect I have not as yet been able to learn.

From the limited experience with rhus aromatica, and the results produced by its use, I shall continue to prescribe it in the above-named diseases, with every prospect of a favorable report; and I am convinced from observation, experience, and recent research on this medicinal agent, that it bids fair to become one of the most useful articles in the materia medica. In addition to the above-named diseases, where such marvelous cures have been made by its use, it has been recently employed with success by numerous practitioners—I mean of the eclectic school (for the allopathic have not, as yet, even deigned to notice it), in hemorrhages from the stomach, bladder, lungs, kidneys, and uterus; in leucorrhœa, diarrhœa, chronic laryngitis, and bronchitis.

Prof. John King has recently received a letter from A. G. Springsteen, M. D., of Cleveland, Ohio, a man well known in the profession, in which he refers to a patient "suffering for several years from catarrh of the bladder, and hypertrophy of the prostate, with excruciating pain during micturition, necessitating the continued use of the soft catheter, the introduction of which invariably proved painful. After exhausting the employment of all recognized remedies for the patient's condition, together with the use of the water at the Hot Springs of Arkansas, etc., without the least benefit, as a *dernier ressort*, he placed the patient upon teaspoonful doses, three or four times daily, of the fluid extract of rhus aromatica. In three weeks' time the symptoms were all removed, and the prostate so far reduced that the use of the soft catheter become unnecessary. The patient is sixty-five years old, and at this time voids urine as freely and as painlessly as a boy of eighteen years.—*Medidal Tribune.*

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BERGENIN.—An investigation into the physiological and therapeutical properties of the various species of saxifrage, especially S. sibirica, cardifolia, and crassifolia, has been carried on for some years by Drs. Garreau and Machelart. In the stems of these plants, there is, besides tannin, a hitherto unknown body, which it is proposed to call "bergenin." It is obtained by first extracting the tannin by means of ether, and then treating the plant with pure alcohol. Bergenin is a whitish translucent substance, having the bitter taste of caffein and quinine. It crystallizes from alcohol in tetrahedral crystals; but from a watery solution, in prisms. It has no action of polarised light. At the temperature of 140° C. it loses an atom of water, and runs into a colorless or amber-colored fluid, which forms, when it cools, a translucent mass, and this gradually, by contact with the air, reassumes its lost atom of water, and is transformed into tetrahedrons. At the temperature of 300° C. it is decomposed into a variety of carbohydrates. It has a slightly acid reaction, and by dilute nitric acid it is transformed into oxalic acid. It forms soluble salts with potash, lime, baryta, and magnesia. Analysis shows that it has the formula $C_6H_3O_3HO$. It is said to be a valuable remedial agent, having a stimulant and tonic action on the nervous system. It is placed, therapeutically, between salicylic acid and quinine. The parts of the plant which contain it possess the same properties, with, in addition an astringent action, from the large quantity of tannin they contain.—*Lancet*, Nov., 1881.

VIBURNUM PRUNIFOLIUM UNRELIABLE IN ABORTION—A REJOINDER.—I ask space for some remarks in reply to Dr. Thomas F. Houston's article in your last issue. The Doctor's very confident expressions as to the virtues of viburnum prunifolium, though doubtless honestly made on his part, do not convince me of any error in my views, or set aside the facts and experiments upon which they were based. And as to doctors disagreeing, that is a thing of daily occurrence in all the departments of science.

Medicine is not an exact science, and cannot be demonstrated by a mathematical elucidation, and until a better method of arriving at correct conclusions than any now known to the medical men, there will be continual differences of opinion and conclusions, in all of its departments.

In my article in the Decemeber number of the Record, there was no wish or intention to invite a discussion upon the merits of the remedy in question. (There is nothing to discuss.) The desire was simply to warn the confiding members of the profession to avoid the rocks, shoals and quicksands upon which I have so often been wrecked. Badinage aside. The virtues of the remedy were sounded through the literature of the day, and so far as I am informed, without question or contradiction, and from my unfortunate experience, I could not permit it to pass any longer without giving the professional public my observations. It was in no prurient desire to appear in public; but after repeated postponings that it was done. The first suggestion was to ask its appearance in the columns of the THERAPEUTIC GAZETTE. But upon reflection concluded that as that journal was principally devoted to the advocacy of new remedies and new preparations, that it might not appear to be compatible with its objects and interests. It was then suggested to offer it to one of my favorites, The Southern Medical Record. I am happy to note the spirit of generous fairness manifested by the THERAPEUTIC GAZETTE in copying the article in the February number.

I regret exceedingly that it was my misfortune to meet with such a signal disappointment in the trial of the remedy, if remedy it is. In the first place, to fail to treat that or any other case successfully. In the second place, to fail to find a new and reliable remedy. In the third place, to be forced to differ with my personal and professional friends and brethren; all of which is very unpleasant and unprofitable, to say the least.

I am charged with not having given it a fair trial. Ten pages of notes of the cases could be given. When making trials and testing remedies, I do not come to hasty and inconsiderate conclusions. Various forms and doses were given to different patients, at different times. In the outset of trials of the remedy, I had several subjects who were habitual abortionists and flattered myself that I would now have no more cause to mourn over failure and disappointments. In a general way I am not sanguine of success; but for once I was carried away with the hope that now I had the remedy of remedies this, to me, troublesome derangement. Trial after trial (fair trials) upon the same and upon different patients were made. And I reiterate it, that in no case when it was relied upon, did it succeed. Some of the cases became dissatisfied and discharged me, others continued. I abandoned its use, as before said, in disappointment, mortification and disgrace, the latter of which I have not recovered from yet. I have adopted a different treatment with different remedies with as good success as could be hoped for in any treatment now known. Having overcome the disposition to miscarry in all the cases who continued under my treatment, all having had more or less children, and have no chronic or habitual cases of abortion or miscarriage at present.

I may be mistaken, but yet think that much, if not all the credit attributed to this much vaunted and highly extolled remedy, is due to the adjuvants and other means used in the treatment of threatened abortions. All of us are, more or less, anxious to give relief as soon as possible; and are, more than likely, in urgent cases, to give more than one remedy, unless the one given relieves the trouble immediately, and more especially is it the case if the remedy is new or uncertain in its action. I am free to admit that such is the habit with myself, unless it is when making a direct experiment, as was the case in the trials I made with viburnum prunifolium. In no case do I recomend the use of any remedy—either new or old—in any new or special way, without giving it numerous, fair and independent trials. True, I may report its use in a single or in a few cases. May and have suggested remedies which I never used, or even heard of being used. But in no case urged and recommended the use of an article for the reason that in one or a few cases it appears to do well. There are a number of articles in our Materia Medica that I think are good remedies, which will not do to rely upon implicitly.

In a few cases of chronic diarrhœa I have had the most happy effects from the use of the fluid extract of guarana, yet in other cases it has failed. An untold number of similar instances might be cited.

In replying to the article of Dr. Houston, there was no argument or reason to give for the dogmatic assertion that viburnum prunifolium had failed as a remedy in threatened abortion—a mere relation of what had not taken place. I have now given the only reason for making it public; and trust that the profession, and especially the readers of this Journal, will pardon the first article, and accept this in explanation, and as an apology for occupying the space in the Record, and their time in reading the same.—A. G. Smythe, M. D.. in *Southern Med. Record*, March 20, 1882.

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VIBURNUM PRUNIFOLIUM.—There is a trite old saying, "When doctors differ then the devil's to pay," but in spite of this warning, I feel constrained to take issue with Dr. A. G. Smythe on account of an article upon this subject, published in the Record for December. The writer utterly annihilates this valuable drug, saying that no remedy had so utterly failed him as viburnum, during a practice forty-five years. While I would not for one moment question the doctor's veracity, I am at a loss to understand these results, so diametrically opposite to my experience in its use. And I must attribute his want of success to the inferiority of the article, or the smallness of the dose. Being a new and comparatively little used remedy, there is not the same care taken in its collection and manufacture as there is of the standard drugs. In regard to the dose, the various works give the dose of the fluid extract (the only form in which the drug should be used) as one drachm. I rarely give less than two, and repeat this every fifteen minutes until I get the desired effect, if I have to give a fluid ounce. In fact, my method of using the drug is to give to my pregnant patients, if there is the slightest tendency to abortion, a bottle of the fluid extract, and direct them to take from one to four drachms every time they feel any pelvic uneasiness, proportioning the dose to the amount of the disturbance, and to assume the recumbent posture. If the patient has ever miscarried, I direct her to take one drachm three times a day during the week in each month that the menses would be present, did not the pregnancy

exist. I could cite many cases in which this treatment succeeded perfectly—in one, the lady went to full time, after having miscarried seven times.

Of course I do not claim that black haw will cause the retention of a dead fœtus, or remove the reflex irritation caused by an ulcer or a laceration of the cervix, or other mechanical or pathological reason for this attempt of the uterus to expel its contents. But in the condition known as irritable uterus, due entirely to nervous action, caused by over exertion, fright, mental worry, an abortive tendency, etc., if the dose is sufficiently large and given early enough in the attack, viburnum will prove itself worthy of the confidence that I ask for it. In cases in which worry or mental excitement or grief is the exciting cause, the bromides, tincture of valerian, or valerianate of ammonia, is a valuable addition. Though I have no ambition to "excel my predecessors in sounding the virtues, claims and praises of viburnum prunifolium in the prevention and arrest of abortion, miscarriage and all the concomitant troubles attending that condition," still I must say that, in my humble judgment, if it is used in the class of cases given, and with sufficient promptness, it is as much a specific for abortion as quinine is for malaria, and aconite for inflammatory fever.

Speaking of quinine, I give it in full doses to pregnant women without hesitancy, simply combining a corresponding dose of black haw with it. Again, there is nothing better for after-pains, and this very evening, since I commenced to write this article, I was summoned to see Mrs. ———, suffering with neuralgic dysmenorrhœa, which was relieved in 15 minutes by 3 ij viburnum and 5 grs. croton chloral hydrate. In ordinary cases the croton chloral is not needed, but if there is much nervousness it is well to combine it.

I trust Dr. Smythe will pardon my differing so strongly with him, but it is in the hope that it will call out the opinion of others who have tested this drug, and who are more competent to defend it than I am.—Thomas F. Houston, M. D., in *Southern Medical Record.*

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Notes on the Physiological Action of Kava Kava.—Kava is prepares by the natives of the Fiji Islands, from the yangona root (Piper Methysticum). This plant posesses properties which will, doubtless, bring it into use as an article of materia medica—indeed from causal notices in the few medical journals that I have seen in this remote region, I perceive that it has already attracted some notice. I have thought, however, that it might not be altogether superfluous that I might give a short description of its action, taken from personal observation upon kava drinkers, and upon patients to whom I have administered it experimentally.

The root only of the plant is used in the preparation of kava, the old and dried root being preferred, the fresh root having a rough and bitter taste. The general mode of preparation or "brewing" consists in its mastication to the state of pulp, subsequent trituration with water in a large wooden bowl (called the tanoa) and straining through a filter of fibres of the hibiscus. The resulting "brew," of a muddy brown appearance, is then fit for immediate consumption. It is quaffed from bowels of cocoa-nut, which, in common with the tanoa, acquire after a few months' usage a pearly enamel of a bluish hue. This surface, by frequent rubbing with a soft cloth, acquires a polish like glass—indicating, I should suppose, the presence of silica. This coating of enamel varies with the age of the vessel. On a tanoa which I possess, and which is some score of years old, the layer is nearly half an inch through its thickest part.

Kava is now prepared for Europeans by simply pounding, or grating; the former process of insalivation being thus dispensed with.

The general belief that kava has stupefactive, or intoxicating properties is incorrect. Its primary effect is stimulating, like coffee, but it certainly has no intoxicating effect whatever; indeed I should say that its efforts are the reverse, clearing the head and sharpening the mental faculties. It is re-invigorating, and I know of no dranght more refreshing in fatigue from bodily exertion. It exerts a powerful action upon the salivary glands, speedily and effectively allaying the thirst incident to hot climates.

A night's carouse, however, from kava, as frequently indulged in by the natives impairs the function of locomotion, and you have the curious spectacle of a man utterly drunk in his walk, while his intellect is unclouded—he is unable to control the movements of his legs, but is perfectly aware of his disability. When the effects have passed off, there remains no after consequences, *e. g.* "hot coppers;" "sore heads" are unknown as as a result of kava drinking. Deducing from these facts a direct action upon the spinal cord, I have used, with decidedly beneficial effect, a concentrated extract of this root, in several cases where I suspected congestion of that portion of the nervous centres.

The bodily temperature is not increased by the action of kava; it has only slight influence over the pulse, which, however, it somewhat steadies. Its action upon the intestines is constipating. I have seen "liver complaints" induced by habitual kava-drinking, but my experience under this head is incomplete. Old and inveterate kava drinkers have a belief that the eyesight is injuriously affected by a continued indulgence in its use, but I have not had sufficiently long observation for confirmation, and have, as yet, seen no evidence thereof.

The most marked and valuable property of kava is its action upon the genito-urinary tract. Chronic gonorrhœal gleet I have found yield readily to its effects, and in chronic cystitis it possesses an influence superior to any other remedy with which I am acquainted.—Leighton Kesteven, M. R. C. S., in *The Practitioner.*

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Viburnum Prunifolium and Stigmata Maidis.—I am prompted to add my testimony for the benefit of physio-medicalists who have not given the articles a trial; of the first (viburnum) by reading the editorial summing up of contributed evidence, in the Therapeutic Gazette, page 467.

Dr. Phares, of Mississippi, describes it as "nervine, antispasmodic, tonic and diuretic" and adds "but it is particularly valuable in preventing abortion and miscarriage, whether habitual or otherwise; whether threatened from accidental cause or criminal drugging. It tones up the system, preventing or removing those harrassing nervous symptoms that so often torment and wear out the pregnant woman, and disqualifies her for the parturient effort; and further that it had prevented abortion in every case in which he had ordered it for that purpose." In all of the above I fully concur. In fact I prescribe no drug with more confidence than I do Viburnum, for the indications above, also for that form of dysmenorrhœa where there is profuse menstrual discharge, and to anticipate post partum hemorrhage, etc. It is an undoubted anti-abortive, but the editor referred to puts it that it is a certain anti-oxytocic which I think is wrong, as I do not know of any article in the materia medica that will contribute so much toward bringing about physiological labor, and in fact I have used no other oxytocic for several years than Viburnum alone or combined with Caulophyllum and diffusive stimulants, as the particular case might indicate. For habitual abortion I combine Viburnum Pruni. with Mitchella and Caulophyllum, instead of using the old Mitchella compound, and adding it to the

syrup Mitchella compound would be a good way to use it.

*Case.*—Mrs. S., primipara, pregnant 4½ or 5 months—thrown or tumbled backwards from an open buggy by a runaway horse, December 8, 1881, and escaped with as little injury as possible, only slight shock and fright, but commenced to complain of pain in back, and in a few minutes more, of abdominal pains threatening abortion. Happening near my residence, she was carried in and, I at once gave of the following: Viburnum prunifolium, caulophyllum, fluid extracts, equal parts, tinct. zingiber ¼ part. Dose, one large teaspoonful, to be repeated every two hours until relieved; after taking the second dose, felt well enough to go home. I ordered that she keep quiet and warm, and take a dose at bed time and continue as before if necessary; rested well all night, on awakening felt well, except being very sore, but on attempting to get up and moving about severe pains supervened with some hemorrhage. The husband hurriedly and excitedly told me her condition and said that he felt certain that she would be sick. I directed the same as before which gave immediate relief and she has remained well to date (Jan. 11, 1882).

I have found stigmata maize to act kindly and certainly as a diuretic. I have not at this date determined just in what conditions it is most indicated, except in suppressed urine. It has given prompt in the numerous cases among old or elderly women, less among the young, denominated gravel where there is scant and scalding urine; and I also used it in several cases of typhoid and other low fevers where a diuretic was indicated. I have used P., D. & Co.'s fluid extract, also an infusion of stigmata gathered by myself. Another thing it is not in the least objectionable to the taste.—W. B. Carson; M. D., in *Physio-Medical Journal, January*, 1882.

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Vaccination and Vaccinization.—The alarming prevalence of small-pox through certain sections of the country, notwithstanding the very general vaccination which has been practiced during the past few years, will have the effect of stimulating inquiry into the protective influence of the operation as it is ordinarily performed. It is only those who, having declared against the power of vaccinia to protect against variola, and are casting about for arguments to support their position, who will seize upon the existence of the present epidemic in the Northwestern States as a prop with which to sustain themselves. Such argument, is, however, that of the special pleader, and ill befits the earnest searcher after truth. The fact that a vaccinated person in a given case is seized with small-pox, is not a legitimate argument against vaccination, in the proper meaning of the term. There are many reasons why the operation may have proven a failure: The virus may not have been of proper quality, and although it may have caused a local sore, that sore may not have had the characteristics of the vaccinia pustule. This, we believe, is a not uncommon occurrence. The effects of vaccinia may have disappeared from the system; they evidently do pass from the systems of some sooner than from others, as attested by the results of revaccination. Perhaps humanized virus, which has passed through many systems, has been employed, and, the views of Jenner to the contrary notwithstanding, it seems to be no longer doubtful that humanized virus undergoes deterioration in its passage through the system, and is not as safe a protective as that which has been taken directly from the heifer.

But all of the above conditions may be observed, and precautions taken, and still the vaccinated person not be proof against small-pox. A recent German writer has submitted a plausible suggestion as to the cause of the incomplete immunity in such cases. The person, he says, although vaccinated, is not "vaccinized"—the latter term being that by which he designates such a charging of the system with vaccinia as to overcome the susceptibility to variola. A series of carefully conducted experiments has convinced him that a not inconsiderable proportion of those vaccinated are not vaccinized. He now recommends, and in cases where he has authority, compels successive vaccinations until the susceptibility to the virus has completely disappeared, as indicated by absence of the slightest trace of the essential characters of the vaccine pustules at the point of application. He has found that in some sores more or less characteristic may be produced until the third vaccination, and holds that as long as such a sore is possible, the person is susceptible to small-pox. These observations are pregnant with suggestion, and perhaps we have in them the removal of the weighty argument against vaccination, which exists in the fact that vaccinated persons not infrequently die of variola, the vaccination not having vaccinized.—*Michigan Medical News.*

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Therapeutic Effects of Damiana.—In Paris Médical, No. 48, we read that damiana, turnera aphrodisiaca is a herbaceous plant belonging to the portulaca family, and growing in Brazil and on the western coast of Mexico. Its flowers are white, and have the odor of buchu. It is gathered during August, while its stems are covered with an odoriferous gum-resin.

Damiana has for a long time been used among the Mexicans as a tonic; its stems and leaves are made into a decoction, which is taken to restore strength and nerve energy. It is also given in cases of impotency in either sex. It exerts a specially tonic and stimlating effect on the genito-urinary organs of both sexes, and when given in medium doses, acts as an aphrodisiac, an alterative, and a laxative, with a tendency to increasing the urinary secretions and developing sexual desires. In small doses, it appears to have specific tonic effects on all the pelvic organs, and gives increased activity to the secretions. It is also recommended as a nervine.

Damiana, could, therefore, be used as an aphrodisiac in spermatorrhœa, in atrophy of the testicles, and in incontinence of urine; also as a powerful stimulant of the cerebral faculties, and in all accidents attending premature labor, in difficult menstruation, and in the diseases following gestation.

The effects of damiana are quite different from those of strychnine, phosphorus, or cantharides, which are given in small doses, for the purpose of obtaining immediate results. It acts, not as an irritant, but as a stimulant of the brain, and a tonic of the nerve centres governing the urino-genital apparatus, and its use has to be continued for several weeks. Its effects are chiefly noticeable on the sympathetic nerve, and when taken in large doses, it produces a peculiar intoxication, attended with slight pains in the prostatic region. Its good effects on the kidneys, the bladder, and the genital organs, are also manifest.

In doses of a teaspoonful three or four times daily, continued for several days, damiana has a pleasant laxative effect. The fluid extract is generally prescribed; it is combined with equal parts of pure glycerine, or syrup of tolu, or a fruit syrup of some kind. It may also be taken in wine. It is given in doses of thirty to sixty grains, three or four times daily. A solid extract is also prepared, of which the dose is thirty to sixty centigrams, (=gr. iv ss—gr. ix).—*Med. and Surg. Reporter*, Feb. 18, 1882.

CASCARA SAGRADA FOR CONSTIPATION.—For the past two years I have been making constant use in my practice of the fluid extract of cascara sagrada (rhamnus purshiana) for chronic constipation. It always affords relief in even the most obstinate and inveterate caess, and often seems to effect a permanent cure. My methods of using it are as follows: For persons who do not object to the intense bitter taste of the medicine in plain water, I order a two-ounce bottle of the fluid extract, with directions to begin by taking ten drops in a wineglass of water before each meal. If within two or three days this does not produce a regular natural evacuation every morning, the patient is told to increase the dose by two or three drops every day until the required effect is produced; then to continue with that amount regularly three times a day for a week or ten days. At the expiration of that time, I advise that the dose be decreased again by taking one drop less every day, until it is reduced to nothing. Then, if the habit of soliciting a movement punctually at a regular time every morning is kept up, there is usually no more difficulty. In many cases the initial dose of ten drops three times a day is quite sufficient. Occasionally it is found too much, and five or six drops answer every purpose. In the more obstinate cases, however,—cases of patients who have accustomed themselves to take three or four compound cathartic pills, or some harsher quack concoction, every few weeks or days, "to keep their liver acting,"—the bowels sometimes require half-teaspoonful, and in rare instances even teaspoonful doses, three times a day to bring about regular alvine evacuations. Taken in this way before meals this medicine acts as a tonic to the stomach, increasing the appetite and improving the digestion, at the same that it strengthens the peristaltic movements ot the intestines and apparently stimulates the normal functions of the liver.

But the cascara is one of the bitterest of medicines and many persons, especially ladies and children, cannot take it unless it is first well disguised by elixirs, etc. For the benefit of these I have been accustomed to compound it as follows:

℞ Ext. cascara sagrada, f ʒ vj.
Glycerinæ, f ʒ j.
Curacoa, f ʒ ij.
Syr. glycyrrhiz. ad f ʒ vi.

M. A teaspoonful of this mixture, which is comparatively palatable, will represent about ten drops of the cascara; and a tablespoonful will represent half a teaspoonful of the same, which is usually all that the worse cases require, taking it three times a day.

A solid extract of the same drug is now prepared, so that it can be ordered in proportionate doses in pill form, for thost who prefer pills to potions.

These cascara preparations seem to me to act even better than the famous dinner pill, and other aloetic pills which have been so much in vogue for two generations at least. One thing is certain, they accomplish the purpose of a laxative most admirably, and usually—though not in every case—the dose can be diminished or even omitted altogether after a time, while other laxatives nearly always lose their effect, larger and larger doses becoming necessary.—Dr. Boardman Reed in *Medical Bulletin*, Jan., 1882.

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THE ETHICS OF MEDICAL CERTIFICATES.—Dr. Billings, of Washington, in a recent address to the graduating class of Bellevue Hospital Medical College, said a very good thing when, speaking of their future professional relations, he remarked that in the matter of ethics their first duty would be for each to look after his own ethics before he gave himself much trouble about the ethics of his neighbor.

In connection with this subject, it may not be entirely out of place to refer here to the extent to which certain members of the American Medical Association have of late years given certificates of the medicinal virtues of secret remedies, wines, food preparations, mineral waters, etc., which certificates, with an enumeration of the professional positions held by their writers, have been used for public advertisement with the knowledge and consent of their makers. This has been done in the case of articles the true nature and composition of which is not generally known, or, if known to the persons who certified at the time of their writing, there could have been no guarantee that the articles would remain the same, or that having once acquired a reputation (in part through the value of such certificates) their composition would not be altered in the interests of the manufacturer rather than of the consumer.

The motive for giving such certificates can readily be inferred to be a desire to secure an advertisement in the public prints in such a manner as to invite "the attention of individuals affected with particular diseases," and in other ways to evade the provisions of Section 3 of Article 1 of the code relating to "Duties for the Support of Professional Character."

The manner in which the Association has of late years ignored the existence of this growing evil, while devoting hours to discussions and resolutions about the right of women to practice medicine, or of medical colleges to grant diplomas to students who might, after graduation, exercise the right to give their patients such remedies as they considered most likely to expedite recovery, is a most remarkable instance of ethical strabismus, and reminds one of "straining at a gnat and swallowing a camel."—*New Remedies*, April, 1882.

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QUEBRACHITANNIC ACID AND QUEBRICATECHIN.—Quebrachitannic acid, according to P. N. Arata, is best prepared from the so-called gum of the quebracho colorado, quebrachia (Loxopterygium) Lorentzii, Grisebach. The gum is purified by treatment with alcohol, then dissolved in boiling water, and the hot filtered liquid set aside, the reddish deposit is collected on a filter, the mother liquor precipitated by a mineral acid or by table salt, and the precipitates are rapidly washed, pressed between bibulous paper and dried over sulphuric acid. The tannin is pale red, amorphous, yields a cinnamon-colored powder, is readily colored darker by alkalies, or by prolonged boiling of its solution, has an astringent taste, and is insoluble in carbon bisulphide, chloroform, oil of turpentine and benzine. Its aqueous solution yields white precipitates with gelatin, albumen, alkaloids and lead salts, the latter, on heating, acquiring a rose and then a chocolate color; with ferric chloride, a green liquor is produced, changing to dark red, and on the addition of sodium acetate, to black. On dry distillation the tannin yields catechol; strong nitric acid converts it into oxalic and picric acids, and by fusion with potassa it is resolved into phloroglucol and protocatechuic acid. The tannin contains C 52.52, H 5.11.

Quebrachicatechin (see Am. Jour. Phar., 1879, p. 152) extracted by ether from the mother liquid from which quebrachitannin has been precipitated, is freely soluble in alcohol and ether, sparingly soluble in hot water, gives rose-colored precipitates with basic lead acetate and with mercurous nitrate; blackish with a mixture of ferrous sulphate and sodium acetate, reduces silver nitrate and gold chloride; is colored yellow by nitric acid, red by sulphuric acid, yellowish by sodium hypochlorite, green by Fehling's solution; does not precipitate gelatin or the alkaloids.—*Amer. Jour. of Phar.*, Feb., 1882.

ON THE PHYSIOLOGICAL ACTION OF THE ASCLEPIAS CURASSAVICA.—We read in a recent number of the Uniäo Medico, of Rio Janeiro, that Dr. Guimarães has made a series of experimental investigations on the physiological action of the Asclepias curassavica—a common plant in Brazil, and known to European botanists under the name of bastard ipecacuan. Dr. Guimarães made 25 experiments on various animals, such as dogs, rats, guinea-pigs, etc., and he obtained some well-marked results, among which were the following: The active principle is a cardiac poison, resembling digitalis in its action; and, like almost all such poisons, the asclepias affects all the striated muscles, and causes them to lose their contractility, It does not exercise any injurious action on the nervous centres presiding over the life of relation, nor on the sensitive or motor nerves. An alcoholic solution of the roots injected into the veins, immediately causes a great constriction of the small vessels, resulting in a considerable increase of blood-tension in the large ones, and a more or less rapid reduction of the normal temperature. It is an excitant of the vaso-motor centres. Besides these primary effects, the asclepias produces others which are secondary, among the most notable of which are disturbances of respiration, from a state of light dyspnœa to great orthopnœa; and disorder of the digestive system, marked principally by vomiting and diarrhœa. The solution obtained by maceration from the stems and roots acts on the heart and the vessels, but with unequal intensity—that from the stalks exercising a more marked and rapid action on the heart than the solution from the roots; but the reverse takes place when the action is exerted on the vaso-motor centres.—*Med. Times and Gazette—N. C. Med. Jour.*

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LATHAM ON SALICYLIC ACID AS A SPECIFIC FOR ACUTE RHEUMATISM.—In the British Medical Journal, January, 1882, p. 46, Dr. P. W. Latham asks, "Is salicylic acid a specific for acute rheumatism?" and gives a short summary of his theory of the pathology of acute rheumatism.

1. A nervous centre exists, which controls the nutrition of the muscular and other tissues, and which has been termed the "inhibitory chemical centre."

2. The action of cold, lowering the power of this centre, may modify the nutrition of the tissues and lead to excessive formation of lactic acid and other products.

3. The presence of lactic acid, in abnormal amount, produces function changes in these nerve-centres, and develops symptoms of acute rheumatism, similar to the production of symptoms in locomotor ataxy, with its joint-affections, by organic changes.

4. If portions of the vagus be involved, then cardiac, pulmonary, or pleuritic complications may develop.

5. Salicylic acid combines with the antecedents of lactic acid, and so prevents its formation.

6. If the remedy be discontinued too early, a relapse will certainly take place. As much of the remedy should be given from the first as can be borne, and great care must be taken to secure a pure form of the salicylic acid; that which is artificially prepared is often dangerous to administer, while pure acid seldom causes unpleasant symptoms.—*London Medical Record*, March 15, 1882.

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TREATMENT OF RABIES WITH HOANG-NAN.—Hoang-nang is a creeper found in the mountains separating the kingdom of Annam from Laos. This plant belongs to the family of Loganiaceæ. So says Dr. Lesserteur. It produces the same physiological effects as strychnia and brucia. However, under its influence, it is always the lower limbs which first are affected with tetanus, and in which the greatest amount of contraction is observed after death.

The Tonqua remedy is prepared after the following formula: Alum, 1 part; native realgar, 2 parts; bark of hoang-nan, 2 parts; the whole is powdered and made into pills containing each 25 centigrammes of the mixture.

Hoang-nan alone and the above mixture have been used as remedies for the leprosy, rabies, bad ulcers, scrofulidæ, paralysis, etc. It is reported to have marvelous effects in leprosy, yet experimenters have not met with any success. It has the reputation of being infallible for rabies, even when in its worst period, but such affirmations have not scientific value.

The Tonqua remedy was known at the beginning of the last century; it was then composed of cinnabar and musk. It seems to have rendered good service in the hands of the physicians of the time, in the treatment of rabies.—*Paris Mèdical.*

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HYOSCIN.—Landeberg has prepared from amorphous hyoscyamin a pure alkaloid which he calls hyoscin, which forms a crystalline compound with hydriodic acid, and an amorphous compound with hydrochloric acid. The therapeutic value of these compounds has been tested by Edlefsen and Illing at Kiel. They conclude that both salts are active and convenient agents. The iodine compound is the more powerful, perhaps because, being crystalline, it is purer. Their action resembles that of atropine, but their value in some diseases, is greater. Larger doses can be given without producing disturbance of vision, or dryness in the throat, and the sedative action is greater. Dryness in the throat is produced by a milligramme and a half of the iodine salt. Toxic symptoms (with 3 milligrammes) were very similar to those caused by atropine—delirium, disturbed vision, dryness in the throat, and uncertainty of gait. Four times the dose of the chlorine compound did not cause these symptoms. In whooping-cough, benefit was obtained in half the cases. It was used in six cases of asthma, and did good in all. In two cases of severe enteralgia the pain was at once relieved by it. In a case of epilepsy the number of attacks was reduced.—*Lancet*, Nov., 1881.

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COCA A CURE EOR MORPHINISM.—"La Independencia Medico" quotes the following case: A lady had been in the habit of alleviating her sufferings with morphine, of which drug she finally took sixteen grains a day. Thirty hours after having taken her last dose she was found in a condition of great anguish, excitation, and inquietude. During the night chloral hydrate and bomide of potassium were given to allay the excitation and produce sleep. The next day she was very weak and restless, hardly able to speak, and tormented with vomiting; the pulse was 150. The fluid extract of coca was administered in doses of a tablespoonful. The first dose had but little effect. The second was followed by a wonderful change; the pulse fell to 85, the countenance assumed color and animation, and the vomiting ceased. The patient began to speak, and was in excellent spirits. She slept almost half of the following night, awoke refreshed, with a pulse of 75, took breakfast, and digested it well. She continued to improve, rode in a carriage for quite a distance, and left the city next day, taking with her an eight-ounce bottle of coca, which remedy she continued to take in diminishing doses. When she ceased taking it she was enjoying good health, without the use of mo-r phine.—*Med. Record; Louis. Med. News.*

THE THERAPEUTIC ACTION OF QUINOLIN.—Dr. Von Jäksch has ascertained that chemically pure quinolin is a colorless liquid boiling at 228° C., with a penetrating aromatic odor. The hydrochlorate of quinolin can be prepared from the commercial drug, and the author finds that in this form it is more suitable for therapeutic purposes than the free base. Hydrochlorate of quinolin is an exceedingly hygroscopic substance, which rapidly liquefies when exposed to the air, is readily soluble in water, and has an exceedingly disagreeable, sharp taste, which may best be disguised by means of the organic acids. Thus it may be administered according to the following formula:

℞ Quinolin hydrochlorate, 2–4 grams.
Acid citric, sive tartar, 1–2 grams.
Aq. destill, 50 grams.
Syr. rub. idæi, 30 grams (raspberry syrup).

To be taken two or three times a day.

The remedy is useful in typhus, intermittent fever, tuberculosis, pneumonia, erysipelas, puerperal septicæmia. The result arrived at by Von Jäksch is, that quinolin acts in such cases as a decided antiseptic; but the objections which he raises to its use are the very unpleasant taste of the drug, and the vomiting to which it gives rise.—*Med. Chir. Rundschau.*

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ACTION OF DUBOISIA.—Dr. G. A. Gibson (Jour. of Anat. and Phys., vol. xiv) has investigated the action of duboisia, the alkaloid of the Pituri plant, on the circulation. He arrives at the following conclusions: 1. Duboisia, in quantities not exceeding 5 milligrammes (0.075 grain), raises the arterial blood-pressure without materially affecting the pulse-rate. 2. In quantities not exceeding 5 centigrammes it diminishes the blood-pressure, and lessens the pulse-rate. 3. In quantities of 5 centigrammes and upwards it causes death, with the heart in a state of diastole. 4. Upon the heart itself duboisia has but little action, except in very large doses, *i. e.*, doses of more than 5 centigrammes, and then it causes arrest of the heart in diastole. 5. Duboisia stimulates the central inhibitory mechanism. 6. The alkaloid paralyzes the peripheral inhibitory apparatus. 7. Duboisia stimulates the central vaso-motor apparatus and causes contraction of the arterioles in small doses; in large doses, it lessens the activity of the central vasometor mechanism, and dilates the arterioles. 8. Duboisia has no influence over the sympathetic nerve.—Robert Saundby, M. D., in *London Med. Record*, Jan. 15, 1882.

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GRINDELIA BOBUSTA.—Dr. W. Hope Davis, in the Eclectic Medical Journal, writes as follows: Grindelia robusta is the last of the "new remedies" I shall have time to mention on this occasion; and and I hope that enough has not been introduced to make you weary. The flower heads of the plant contain the essential part of the medicine, though the shrub contains a large amount of balsamic resin, which is medicinal. This balsam embraces an oil which gives off the characteristic odor. Alcohol readily takes up the medicinal principle of the herb; and the tincture is prescribed in from 10 to 30-drop doses. It proves to be a demulcent, relieving irritated and excoriated surfaces; it is said to adtidote the bite of venomous insects and reptiles; and it will cure specific urethritis and vaginitis. It allays urethral excitement, and is therefore valuable in gonorrhœa; it also soothes mucous surfaces. It has been employed successfully in conjunctivitis, and purulent ophthalmia. I have used grindelia upon chronic ulcers with the happiest effects. I do not think any other remedy will so readily and certainly promote reparative action in indolent ulcers on any part of the body, as this. I intend to experiment largely with this remedy, and trust that others will do the same thing. The agent thus far promises well.

Grindelia robusta has lately been introduced to the medical profession from California. It is a herbaceous plant, perennial, natural order Compositæ. It is a slender, smooth plant, from one to two feet high, with a few short branches near the top. The leaves are oblong spathulate, alternate, sessile, and remotely toothed. Each plant has from one to four globular radiate heads. The involucre consists of numerous imbricated scales, covered with a balsamic resin. The ray flowers are zanthic. The old dried plant is nearly inert, hence the fluid extract of the fresh herb should be used. The flower heads abound in a balsamic resin, in which its medical virtues reside.—*California Medical Journal*, Feb., 1882.

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RHUS TOXICODENDRON—(POISON OAK.—Having noticed quite a number of remedies offered in the journals during the part twelve months for the cure of the distressing rash caused by poison oak, I offer a specific in "sassafras tea"—an infusion of the root, or better, the bark of the root of red sassafras—for there are certainly two varieties, known as the red and the white sassafras. Bathe diseases surface frequently, or constantly in the cold infusion, or, better, apply a wet cloth. I am very susceptible of this poison myself, and stumbled upon this remedy from painful experience about 15 years ago. I have used no other remedy since that time, though frequently called upon to prescribe for this poison, and in several cases that were aggravated by the application of various remedies, many of them worse than the disease. In such cases I advise the warm infusion as a drink three times a day, which, with sugar and cream, makes a pretty good substitute for tea or coffee. I have found this remedy a success in other skin diseases.—R. L. Hinton, M. D., in *Southern Medical Record.*

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TAYUYA AS AN ANTISYPHILITIC.—The tayuya plant (Dermophilia Peudatica) was introduced into Europe by an Italian naturalist, Luigi Ubicini. This naturalist had become acquainted with the fact that the natives used the plant against syphilis. The root (Revue de Therapeutique Medico-Chirurgicale) is the most active part of the plant, and from it the Italians prepare two tinctures. The stronger so-called mother tincture is employed subcutaneously in daily doses of one gramme. The weaker tincture, made by diluting the first with three parts of alcohol, and is employed internally in daily doses of from six to sixty drops. Analysis has yielded only oxalates of lime and magnesia, iron, resin, and an uncrystallizable substance supposed to be an alkaloid. The physiological effects of this in minimal doses approach those of aloes, but in larger doses it produces salivation, diarrhœa and diaphoresis. It is claimed that Italian clinical experience has shown this plant to be of much value in syphilis.—*The Druggist*, Jan., 1882.

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INDIAN HEMP IN HYDROPHOBIA.—Mr. John Ruxton, in the Brit. Med. Jour., Nov., 1881, p. 811, reports a case of hydrophobia which recovered under the use of the wet pack and Indian hemp. The patient was a lad of six years, and took five-minim doses of the tincture, so as to produce deep and long continued sleep, from which he awoke able to swallow fluids, and make a rapid recovery. [Mr. Ruxton is evidently unaware that the Indian hemp has been a long known and highly valued drug in the treatment of hydrophobia. In the Lancet, July, 1840, p. 540, Dr. O'Shaughnessy reported a case in which the power of the drug to alleviate many of the symptoms of hydrophobia was well illustrated. Professor Polli, in the Med. Press and Circular, Dec. 15, 1869, also gave de-

tails of a case in which hemp gave vast relief, although it did not cure the patient, a man aged thirty-eight years —Vide *Med. Digest*, 527, *Rep.*] —*London Med. Record.*

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ERGOT IN DIABETES.—Professor Da Costa reports six cases of diabetes insipidus treated with ergot with five recoveries. The remedy is given in the form of fluid extract and not less than three fluid drachms per day, and this amount should be gradually increased to double its quantity. It may be well to follow the ergot, after the amount of urine has been reduced to the normal, with strychnia. In other cases where the ergot must be continued for some time, cod liver oil is a good adjunct.—*Medical News.*

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SALOMON ON THE THERAPEUTICAL USES OF YERBA SANTA.—Dr. Salomon reports (New Orleans Med. and Surg. Jour., Nov. 1881) that yerba santa, eriodycon Californicum, has, in his hands, proved to be a remedy of value in bronchorrhœa, in acute bronchitis, in the cough of measles, and as a prophylactic against laryngismus stridulus. Dr. Salomon employed the fluid extract of the leaves, in doses of ten minims to one drachm, glycerine being the best vehicle, as water and syrup precipitate the gummy portion of the preparation. The author thinks that the remedy acts specifically on the mucous membrane of the air passages as an astringent. In chronic bronchitis, he was compelled in the majority of cases, to abandon its use, and administer other remedies.—*London Medical Record*, Feb. 15, 1882.

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MEDICAL USE OF FIGS.—Prof. Bouchut speaks of some experiments he has made, tending to show that the milky juice of the fig-tree possesses a digestive power. He also observed that when some of this preparation was mixed with animal tissue, it preserved it from decay for a long time. This fact, in connection with Prof. Billroth's experience in a case of cancer of the breast, which was so excessively foul smelling that all his deodorizers failed, which on applying a poultice of dried figs cooked in milk, was entirely freed from odor, give an importance to this homely remedy.—*N. Y. Med. Record.*

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PILOCARPINE AND MUSCARINE.—Dr. S. Ringer has made the curious observation that the antagonism of pilocarpine and extract of muscaria on the frog's heart varies in different months. In the summer months pilocarpine always strongly antagonizes extract of muscaria, but in the winter months there is often no antagonism, and even when it occurs, it is generallly slight. The difference is due to temperature.—*Med. and Surg. Reporter*, Nov. 19, 1881.

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## Official List of Change of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, January 1st, 1882, to March 31st, 1882.

BAILHACHE, P. H., Surgeon. To proceed to Richmond, Va., as inspector. Jan, 31, 1882.

Vansant, John, Surgeon. Detailed as President Board of Survey. Physical examination of officer of the Revenue Marine Service. March 18, 1882.

Wyman, Walter, Surgeon. When relieved by Surgeon Austin to proceed to Baltimore, Md., and assume charge of the service at that port, March 4, 1882.

Fessenden, C. S. D., Surgeon. To proceed to Greenport and Sag Harbor, New York, as inspector. Jan. 26, 1882.

Detailed as president Board of Survey for the physical examination of pilot, to meet at Boston, Mass., Feb. 16, 1882. Feb. 7, 1882.

Purviance, George, Surgeon. To proceed to Gloucester, Mass., to extend relief to shipwrecked seamen. Jan. 12, 1882.

Detailed as recorder Board of Survey for the physical examination of pilot, to meet at Boston, Mass., Feb. 16, 1882. Feb. 7, 1882.

Austin, H. W., Surgeon. To proceed to Cincinnati, Ohio, and assume charge of the Service at that port, relieving Surgeon Wyman. March 4, 1882.

Godfrey, John, Passed Asst. Surgeon. When relieved by Passed Asst. Surgeon Goldsborough to proceed to New Orleans, La., and assume charge of the Service at that port. March 4, 1882.

Goldsborough, C. B., Passed Asst. Surgeon. When relieved by Surgeon Wyman to proceed to Mobile, Ala., and assume charge of the Service at that port. March 4, 1882.

Granted leave of absence for eight days. March 24, 1882.

Irwin, Fairfax, Assistant Surgeon. Granted leave of absence for seven days. Jan. 17, 1882.

O'Connor, F. J., Assistant Surgeon. To report to General Superintendent, L. S. S., for duty as member of board to examine keepers and crews of the Life Saving Service. Jan. 4, 1882. Relieved on account of sickness, and directed to report to Surgeon-in-charge, New York, N. Y., for temporary duty. Jan. 18, 1882. To proceed to Detroit, Mich., and report for duty to the Surgeon-in-charge. Feb. 9, 1882.

Banks, C. E., Assistant Surgeon. To proceed to Portland, Oregon, and assume charge of the Service at that port. March 1, 1882.

Devan, S. C., Assistant Surgeon. Detailed as Recorder Board of Survey. Physical examination of officers of the Revenue Marine Service. March 18, 1882.

Urquhart, F. M., Assistant Surgeon. To report to General Superintendent, L. S. S., for duty as member of board to examine keepers and crews of the Life Saving Service. Jan. 18, 1882.

Kalloch, P. C., Assistant Surgeon. To proceed to New York, N. Y., for temporary duty. Jan. 24, 1882.

RESIGNATION.

Hebersmith, Ernest. Resignation as surgeon accepted to take effect November 26, 1881. Jan. 17, 1882.

PROMOTION.

Smith, Henry. Surgeon. Promoted and appointed surgeon from January 20, 1882. Jan. 20, 1882.

APPOINTMENT.

Kalloch, Barker, C., M. D., of Pennsylvania, having passed successfully the examination required by the Regulations, was appointed an Assistant Surgeon, by the Secretary of the Treasury, January 23, 1882.